

KERN FAN AUTHORITY INTEGRATION PROJECT

Draft Initial Study/Negative Declaration

Prepared for
Kern Fan Authority

October 2019



KERN FAN AUTHORITY INTEGRATION PROJECT

Draft Initial Study/Negative Declaration

Prepared for
Kern Fan Authority

October 2019

626 Wilshire Boulevard
Suite 1100
Los Angeles, CA 90017
213.599.4300
esassoc.com



| | | |
|--------------|------------|---------------|
| Bend | Oakland | San Diego |
| Camarillo | Orlando | San Francisco |
| Delray Beach | Pasadena | Santa Monica |
| Destin | Petaluma | Sarasota |
| Irvine | Portland | Seattle |
| Los Angeles | Sacramento | Tampa |

D130466

OUR COMMITMENT TO SUSTAINABILITY | ESA helps a variety of public and private sector clients plan and prepare for climate change and emerging regulations that limit GHG emissions. ESA is a registered assessor with the California Climate Action Registry, a Climate Leader, and founding reporter for the Climate Registry. ESA is also a corporate member of the U.S. Green Building Council and the Business Council on Climate Change (BC3). Internally, ESA has adopted a Sustainability Vision and Policy Statement and a plan to reduce waste and energy within our operations. This document was produced using recycled paper.

TABLE OF CONTENTS

Kern Fan Authority Integration Project Draft Initial Study/Negative Declaration

| | <u>Page</u> |
|--|-------------|
| Chapter 1, Introduction and Background | 1-1 |
| 1.1 Statutory Authority and Requirements..... | 1-1 |
| 1.2 CEQA Responsible Agencies | 1-2 |
| 1.3 Kern Fan Authority Member Districts..... | 1-2 |
| Chapter 2, Project Description | 2-1 |
| 2.1 Summary of Program Integration..... | 2-1 |
| 2.2 Summary of Integration Facilities and Programs | 2-1 |
| 2.3 Integration Objectives and Benefits..... | 2-18 |
| 2.4 Project Implementation | 2-19 |
| Chapter 3, Initial Study..... | 3-1 |
| Environmental Factors Potentially Affected..... | 3-3 |
| Environmental Checklist | 3-4 |
| 3.1 Aesthetics..... | 3-4 |
| 3.2 Agricultural and Forest Resources | 3-6 |
| 3.3 Air Quality..... | 3-9 |
| 3.4 Biological Resources | 3-11 |
| 3.5 Cultural Resources | 3-13 |
| 3.6 Energy..... | 3-14 |
| 3.7 Geology, Soils, and Seismicity | 3-15 |
| 3.8 Greenhouse Gas Emissions | 3-19 |
| 3.9 Hazards and Hazardous Materials | 3-21 |
| 3.10 Hydrology and Water Quality..... | 3-24 |
| 3.11 Land Use and Land Use Planning..... | 3-27 |
| 3.12 Mineral Resources | 3-28 |
| 3.13 Noise | 3-29 |
| 3.14 Population and Housing..... | 3-31 |
| 3.15 Public Services..... | 3-32 |
| 3.16 Recreation..... | 3-33 |
| 3.17 Transportation and Traffic..... | 3-34 |
| 3.18 Tribal Cultural Resources | 3-35 |
| 3.19 Utilities and Service Systems | 3-36 |
| 3.20 Wildfire | 3-38 |
| 3.21 Mandatory Findings of Significance..... | 3-40 |

List of Figures

| | | |
|---|--|------|
| 1 | Regional Location Map | 1-5 |
| 2 | Rosedale-Rio Bravo Water Storage District Facilities | 2-22 |
| 3 | Kern Delta Water District Facilities | 2-23 |
| 4 | Henry Miller Water District Facilities | 2-24 |
| 5 | Buena Vista Water Storage District Facilities | 2-25 |

List of Tables

| | | |
|---|---|------|
| 1 | Summary of Rosedale Facilities Available to the KFA Integration Program | 2-3 |
| 2 | Summary of Kern Delta Facilities Available to the KFA Integration Program | 2-11 |
| 3 | Summary of Henry Miller Facilities Available to the KFA Integration Program | 2-14 |
| 4 | Summary of Buena Vista Facilities Available to the KFA Integration Program | 2-14 |

CHAPTER 1

Introduction and Background

The Kern Fan Authority (KFA), as the Lead Agency pursuant to the California Environmental Quality Act (CEQA), is proposing to implement the Kern Fan Authority Integration Project (Project). The KFA is comprised of four separate water districts in Kern County, California: Rosedale-Rio Bravo Water Storage District (Rosedale), Kern Delta Water District (Kern Delta), Henry Miller Water District (Henry Miller), and Buena Vista Water Storage District (Buena Vista). These member districts seek to integrate their various water management activities to achieve more efficient operations and flexible response capabilities. Over the last decade, the member districts of the KFA have developed various water management and groundwater banking programs, and each has its own water conveyance, recharge, extraction, and storage infrastructure. By integrating their respective water management activities, Rosedale, Kern Delta, Henry Miller, and Buena Vista will be able to maximize their ability to exchange, transfer, recharge, recover, and operate individual water management activities as a single comprehensive program. This integration would create opportunities for the reciprocal use of facilities and infrastructure among the four members and would not require any new construction. In addition, this integration would be limited by the existing capacity and operational constraints of the individual programs of each agency.

1.1 Statutory Authority and Requirements

In accordance with CEQA (Public Resources Code Sections 21000–21177) and the CEQA Guidelines (California Code of Regulations (CCR), Title 14, Section 15000 et seq.), the KFA, acting in the capacity of Lead Agency, is required to prepare an Initial Study (IS) to determine if the proposed Project may have a significant effect on the environment (CEQA Guidelines Section 15063). If a lead agency finds that there is no substantial evidence that a project, either as proposed or as modified to include the mitigation measures identified in the IS, may cause a significant effect on the environment, the lead agency must prepare a Negative Declaration or Mitigated Negative Declaration (MND) for that project. (Public Resources Code Section 21080(c), CEQA Guidelines Section 15070(b)).

This document is prepared in accordance with the CEQA Guidelines and is intended to provide an environmental analysis to support subsequent discretionary actions associated with the proposed Project (CEQA Guidelines Section 15074). This analysis is not a policy document and its approval by the KFA neither presupposes nor mandates any actions on the part of those agencies from whom permits and other discretionary approvals would be required. This environmental documentation and supporting analysis is subject to a public review period (CEQA Guidelines Sections 15073, 15105); and therefore, is being circulated for public review and

comment for a period of 30 days from October 29, 2019 to November 27, 2019. The KFA will consider any comments received as part of the proposed Project's environmental review and include them with the CEQA documentation for consideration by the KFA Board of Directors. Please send all comments to:

Kern Fan Authority
Eric Averett
c/o Rosedale-Rio Bravo Water Storage District
849 Allen Road, Bakersfield, CA 93314
Email: eaverett@rrbwsd.com

The KFA Board of Directors shall adopt the Negative Declaration only if it finds, on the basis of the whole record before it, that there is no substantial evidence that the proposed Project will have a significant effect on the environment and that the Negative Declaration reflects the Lead Agency's independent judgment and analysis (CEQA Guidelines Section 15074). The KFA shall file a Notice of Determination within five working days after deciding to carry out or approve the project (CEQA Guidelines Section 15075).

1.2 CEQA Responsible Agencies

Each KFA member district is considered a Responsible Agency in accordance with CEQA. Responsible agencies are public agencies that propose to carry out or approve a project for which a lead agency is preparing a Negative Declaration (CEQA Guidelines Section 15381). A responsible agency complies with CEQA by considering the Negative Declaration prepared by the Lead Agency and by reaching its own conclusions on whether and how to approve the project involved (CEQA Guidelines Section 15906(a)). As Responsible Agencies, prior to reaching a decision on the project, each KFA member district shall consider the environmental effects disclosed in this Negative Declaration (CEQA Guidelines Section 15096(f)). The Responsible Agencies shall file a Notice of Determination in the same manner as the Lead Agency, except the Responsible Agencies do not need to state that the Negative Declaration complies with CEQA.

1.3 Kern Fan Authority Member Districts

The water districts of Kern County are leaders in the development of groundwater banking programs in California. Portions of Kern County are characterized by hydrogeologic conditions that are particularly suitable for groundwater recharge operations. Kern County is also strategically located in central California near federal, state, and local water supply conveyance facilities. The groundwater banking programs of Kern County benefit local customers and water districts and also provide groundwater storage for districts in northern and southern California. The four KFA water districts that will integrate their facilities are described below. These districts are all located within the Kern County Subbasin of the San Joaquin Valley Groundwater Basin (see **Figure 1**).

Rosedale-Rio Bravo Water Storage District

Rosedale was established in 1959 to develop a groundwater recharge program to offset overdraft conditions in the regional Kern County aquifer. Rosedale is located west of Bakersfield and

encompasses approximately 44,150 acres in Kern County (Figure 1), with 27,500 acres developed as irrigated agriculture and approximately 7,500 acres developed for urban uses. Prior to the groundwater recharge efforts initiated by Rosedale, groundwater levels in the District were declining at a rate of eight to ten feet per year. Through implementation of groundwater recharge programs and participation in the State Water Project (SWP), Rosedale slowed the decline in groundwater levels dramatically. In the mid-1990s, groundwater levels again were declining, and Rosedale initiated the Conjunctive Use Program (further described below), which manages approximately 470,000 acre feet (AF) of stored groundwater in the underlying basin, with an estimated total storage capacity in excess of 1.7 million AF. Rosedale has groundwater banking agreements with several participants of the Conjunctive Use Program, under which all recharge must occur in advance of extraction. Water is supplied by participant water agencies, high-flow Kern River water, the Central Valley Project (CVP), and SWP.

Kern Delta Water District

Kern Delta was formed in 1965, pursuant to the provisions of California Water District Law (Division 13 of the California Water Code), to serve as a contracting agency for importing SWP water through the Kern County Water Agency (KCWA) and to protect existing Kern River water rights serving the landowners within its boundaries. Kern Delta owns, operates and maintains physical infrastructure and develops and implements plans to support management of surface water and groundwater. Kern Delta provides groundwater management oversight to help balance the water supply in the service area and avoid excessive pumping of groundwater that could result in overdraft conditions. Kern Delta's service area includes 128,960 acres of primarily irrigated agricultural lands, overlapping with some southern areas of the City of Bakersfield (Figure 1). The remaining land uses in the Kern Delta service area include residential, commercial, industrial, recreational, public facilities, dairies, and undeveloped/vacant land. Kern Delta balances three primary sources of water: Kern River water, groundwater, and imported water, to meet customer needs within its district. Thanks to the high quality drainages in the eastern and southern Sierra Nevada mountains, Kern River and its tributaries have flows with relatively low concentrations of dissolved solids and organic compounds, and groundwater quality in the region is high.

Henry Miller Water District

Originally formed in 1964 in order to acquire an existing agricultural water delivery and drainage system, the Henry Miller Water District contracted with KCWA in 1967 to obtain SWP water. Though the SWP is the primary source of the District's water, Henry Miller does have access to Kern River water as well as other surplus local surface supplies, and can also provide groundwater from deep wells within its jurisdiction.

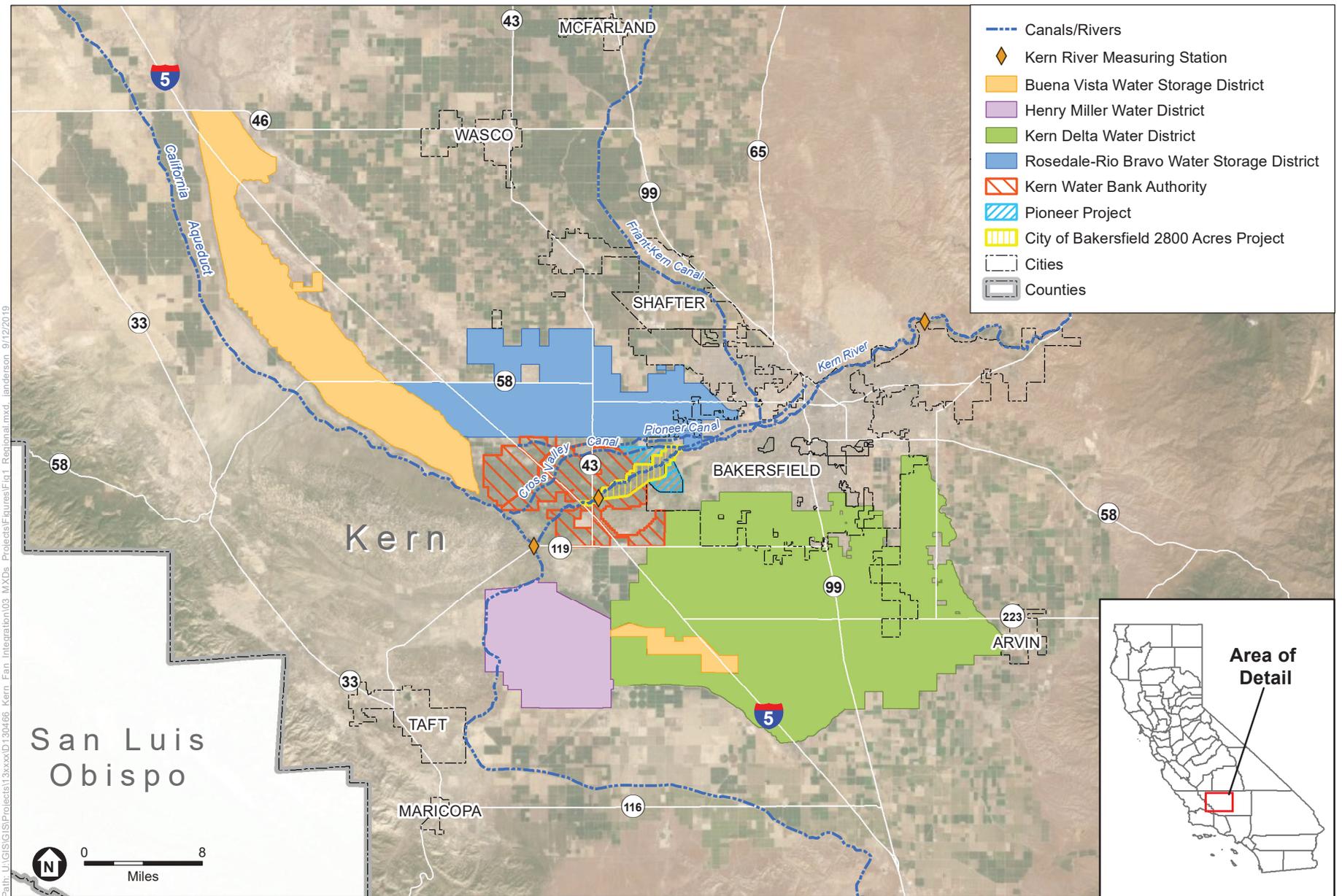
The Henry Miller Water District is located in the west side of the southern San Joaquin Valley, approximately 30 miles southwest of the City of Bakersfield (Figure 1). Its 23,960 total acres primarily consist of the lands in the dry lakebed of Buena Vista Lake and some of the surrounding areas. Henry Miller is bordered by the Buena Vista Aquatic Recreation Area (BVARA) to the north and Coles Levee to the east, while the California Aqueduct marks the north and west portions of the District. Today, the District supplies water to cropland within a

service area of 22,240 acres. Surface water is gravity fed into District from the California Aqueduct and BVARA and is distributed throughout the area using roughly 85 miles of unlined canals and several lift pumps.

Buena Vista Water Storage District

Buena Vista was created in 1924 as an entity to manage the irrigation and tailwater recovery systems and the water rights of Henry Miller and Charles Lux (of the Miller and Lux Partnership). In 1973, Buena Vista contracted with the KCWA to secure an additional surface water supply from the California State Department of Water Resources (DWR) from the SWP, totaling an average entitlement of approximately 158,000 acre-feet per year (AFY). This agreement resulted in an entitlement of 21,300 AFY and a surplus entitlement of 3,750 AF. Located in the San Joaquin Valley near the town of Buttonwillow and approximately 15 miles west of the City of Bakersfield, Buena Vista has a total area of almost 50,000 acres (Figure 1). Buena Vista is located in the lower Kern River Watershed, and its proximity to the SWP allows it to exchange Kern River water for eastern KCWA SWP water. Additionally, Buena Vista has historically used surplus Friant-Kern Canal water for irrigation needs and groundwater recharge. Nearly all the water used in the District is used for agriculture, averaging deliveries of 80,000 AFY; this makes up roughly two-thirds of Buena Vista's crop irrigation needs, with the remainder pumped from landowner groundwater wells.

Today, Buena Vista has access to five turnouts on the California Aqueduct operated by the SWP, providing roughly 850 cubic feet per second (cfs) of added inflow directly into its distribution system. Buena Vista's surface water delivery system is made up of more than 125 miles of unlined canals, which provide substantial operational recharge. Only portions of 3 canals in the District are lined with concrete, totaling about 5 miles. The Buena Vista water delivery system also has a drain flow collection system, which draws in approximately 18,000 AFY of operational spills, tailwater, and storm water runoff. Beginning in 2015 Buena Vista began installing a pipe delivery system that has been installed in the northern half of the Buttonwillow Service Area, with plans to build in 2019 and 2020 another 10 miles of pipe. This would make a total of 40 miles of pipe installed with 3 pumping plants. This allows separating the functions of delivering water from groundwater recharge.



SOURCE: ESRI

Kern Fan Authority Integration
Figure 1
 Regional Location Map

CHAPTER 2

Project Description

2.1 Summary of Program Integration

The KFA member districts seek to integrate their various water management activities to achieve more efficient/cost effective operations and maximize their flexibility to exchange, transfer, recharge, recover, and operate individual recharge and water banking programs as one comprehensive program. The integration would allow for reciprocal use of facilities among the members, with such use restricted to the capacity limitations and operational constraints of the individual Project descriptions. The proposed integration would not require construction of new facilities, but may result in greater use of existing facilities than would occur in the absence of the proposed integration. This chapter provides an overview of each KFA member district's existing facilities that would be available to the proposed Project and includes a summary of the CEQA documents prepared, as appropriate, for existing facilities.

2.2 Summary of Integration Facilities and Programs

2.2.1 Pioneer Groundwater Recharge Project

All four KFA member districts are parties to the Pioneer Groundwater Recharge Project (Pioneer Project) (Figure 1). Under the sponsorship of the KCWA, the Pioneer Project was approved in 1996 and created a coordinated operation of existing and future groundwater recharge and recovery facilities by KCWA members and other users. The surface water resources available to the participants in the Pioneer Project include the Kern River, Kaweah River, Kings River, Tule River, CVP, Friant-Kern Canal, SWP, and California Aqueduct. The Pioneer Project objectives are to 1) recharge, store, and recover imported supplies for use in dry years, and 2) recharge the groundwater basin for overdraft correction. KFA members are "Recharge Participants" collectively sharing a first priority right to use up to 100% of the recharge capacity of the Pioneer Project for overdraft correction and up to 50% of the recharge capacity for groundwater banking. Overdraft correction and groundwater banking are not mutually exclusive. KFA members have a second priority right to use recovery capacity of the Pioneer Project, the first priority right being shared by other "Recovery Participants."

Summary of Certified CEQA Documents

In 1996, KCWA adopted the Initial Study/Negative Declaration for the Pioneer Project, which included areas adjacent to the Kern River available for groundwater replenishment and up to 28 new extraction wells. In 2005, Addendum No. 1 was approved by KCWA for the relocation of up to 10 recovery wells onto adjacent lands in order to reduce well density and minimize well interference. In 2009, Addendum No 2 was approved by KCWA to update the status and location of Pioneer Project recharge and recovery facilities following land exchanges with local landholders.

2.2.2 Rosedale-Rio Bravo Water Storage District

Recharge, Extraction, and Conveyance Facilities

Rosedale has constructed and maintains recharge facilities within its district for the purpose of recharging water when supplies are available. **Figure 2** shows Rosedale’s groundwater recharge and extraction facilities. The Allen Road basins, and Paul Enns basins, Superior basins, Mayer basin, and West basins provide recharge opportunities for Rosedale’s water supplies for the benefit of Rosedale groundwater users as well as banking partners. These facilities are also identified in groundwater banking agreements available for recharging water pursuant to those agreements. Rosedale has also developed a project with the Irvine Ranch Water District (IRWD) and jointly use the Strand Ranch and Stockdale recharge basins. Rosedale provides preferential use of these facilities to the project partners, but is able to utilize them under certain conditions for other Rosedale projects. In 2001 Rosedale certified a Master Environmental Impact Report (MEIR) for its Conjunctive Use Program. As explained in Rosedale’s Environmental Compliance Summary (April, 2011), the MEIR considered the integrated use of these facilities to accommodate specific obligations efficiently as dictated by the availability of water and facilities.

Rosedale maintains extraction facilities associated with its recharge basins, including the Rosedale-ID4 Recovery Facilities (JURP wellfield) in the Allen Road basins, the Enns wellfield, Superior Basins wellfield, and West Basins wellfield. Rosedale also maintains the wells associated with the Strand Ranch and Stockdale projects, which are in partnership with IRWD (described further below).

In addition to the facilities owned and/or operated by Rosedale within and adjacent to its service area, Rosedale has access to those “facilities” which are in the public domain (i.e., groundwater basin, Kern River channel, etc.). Further, Rosedale has agreements with the following entities:

- Kern County Water Agency
 - Rights for use of the Cross Valley Canal
 - Rights to participate in the Pioneer Project
 - Rights to SWP water
- US Bureau of Reclamation
 - Rights to surplus CVP water from Friant–Kern Canal (“215 water”)
- City of Bakersfield
 - Rights to Kern River water
 - Rights to participate in 2800 Acres project
- Kern Water Bank Authority
 - Rights in the Kern Water Bank

Rosedale’s use of these facilities and water supplies is subject to the conditions of approval and availability specified in each agreement. Figure 1 shows the regional network of conveyance facilities used to support these listed programs.

Table 1 identifies facilities and water sources that are available to Rosedale and to the KFA Integration Program. Rosedale’s use of these facilities and water supplies is subject to the conditions of approval and availability specified in each banking partner agreement.

TABLE 1
SUMMARY OF ROSEDALE FACILITIES AVAILABLE TO THE KFA INTEGRATION PROGRAM

| Conveyance | Recharge | Extraction |
|--|---|---|
| <ul style="list-style-type: none"> - Kern River - Goose Lake Slough - Cross Valley Canal - California Aqueduct - Friant-Kern Canal - Pipelines from Rosedale extraction wells to CVC - Interties and turnouts connecting conveyance facilities - Central Intake Pipeline and Pump Station - West Intake Canal | <ul style="list-style-type: none"> • Allen Road Basin • Superior Basins • Enns Basins • Mayer Basins • West Ponds • Kern River • Strand Ranch Basins • Stockdale East and West Basins | <ul style="list-style-type: none"> • Superior Basins wells • West Basin wells • Enns wellfield • JURP wellfield • Stockdale East wells • Stockdale West wells (IRWD) • Strand Ranch wells (IRWD) |

Summary of Certified CEQA Documents

Conjunctive Use Program Master Environmental Impact Report and Addenda

The Groundwater Storage, Banking, Exchange, Extraction and Conjunctive Use Program Master Environmental Impact Report (MEIR, SCH #2000101059) states that it “...is intended to be used as a Program EIR as defined under Section 15168, Article 11, in the Guidelines for Implementation of the California Environmental Quality Act...” CEQA Guidelines provide for the preparation of a Program EIR where there is a series of actions that can be characterized as one large project and are related either geographically, as logical parts in the chain of contemplated actions, or as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways. The advantages of using a Program EIR include: (1) the Program EIR provides an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action; (2) the Program EIR ensures consideration of cumulative impacts that might be slighted in a case-by-case analysis; (3) the Program EIR avoids duplicative reconsideration of basic policy considerations; and (4) the Program EIR allows the lead agency to consider broad policy alternatives and program wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts.

Once a Program EIR has been completed and certified, subsequent activities are examined to determine whether an additional environmental document must be prepared. If the agency finds that no new effects could occur or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required. [14 Cal. Code Regs § 15168(c)(2).]

Under the program described in the MEIR, Rosedale could approve exchanges or transfers such that, depending upon the availability of water, up to 234,549 AFY would be recharged in facilities available to Rosedale and up to 45,750 AFY could be recovered for return to banking partners. With the addition of the Strand Ranch Project (described further below), these numbers are 252,049 AFY for recharge and 63,250 AFY for recovery. With the addition of the Stockdale Project (described further below), these numbers are even higher. Transfers or exchanges could include water supplies available from the SWP, Kern River and Friant-Kern Canal and its tributaries, as well as water supplies from sources unknown that could be transferred to Rosedale. Deliveries would be made through existing transportation facilities available to Rosedale, such as the Rosedale Intake Canal, the Cross Valley Canal (CVC), and the Kern River channel. The MEIR identifies as existing conditions the agreements with KCWA for use of the CVC, the Pioneer Project and SWP allotment, as well as rights to Kern River water through an agreement with the City of Bakersfield.

As to total storage capacity, Rosedale adopted Addendum 1 to the MEIR to amend the water storage banking capacity from 300,000 AF to 930,000 AF based on an aquifer storage capacity study prepared by Sierra Scientific Services (2003). In 2009 a new aquifer storage capacity study was prepared by Sierra Scientific Services which determined the storage capacity underlying Rosedale at approximately 1,756,900 AF, and this figure was approved in Addendum 2.

Within the confines of these broad parameters, Rosedale is free to make operational decisions based on best management practices. This includes the interim use of surplus capacity in existing facilities to accommodate emergency programs, short-term (i.e., five years or less) programs, and spot market opportunities. Any such operational decision instituted under the auspices of the MEIR would not infringe upon existing contractual commitments, would not expand the annual limits for storage, recharge or recovery, and would comply with the following stipulations:

- A contractor wanting to transfer, store or exchange water would negotiate and execute a contract for the delivery of water with Rosedale for recharge in the Rosedale facilities.
- The participant would negotiate and execute an exchange/water supply agreement with Rosedale that would provide for the delivery of the water and for the extraction or exchange of the water when the water is returned to the participating entity.
- Water would be returned to the contractors via the CVC, SWP, or a combination of the two using Rosedale's entitlement or other capacities available for the proposed projects. Actual operations would be defined as individual projects are developed.
- The entity receiving water would put that water to beneficial use. Water stored in the groundwater aquifer underlying Rosedale would be extracted for delivery to the participants through wells, pipelines and canals to the CVC. Alternatively, Rosedale could agree to a transfer of its SWP entitlement, or other water supplies available to Rosedale, and transfer the banked water to Rosedale's account underground thereby eliminating the need for any direct extraction within Rosedale.

MEIR Tiered CEQA Documents

The following CEQA documents have been prepared and adopted and/or certified for the water banking agreements described above. The following documents are all tiered off of the MEIR. **Figure 2** identifies the location of each project within and adjacent to Rosedale, including recharge and extraction facilities.

Allen Road Well Field Mitigated Negative Declaration

Rosedale adopted a Mitigated Negative Declaration (MND) in 2002 (SCH #2001111160) that analyzed operation of groundwater recharge and extraction facilities to be used by Rosedale and other banking agencies to facilitate water banking agreements. Banking entities were not specified. Banking agencies would deliver water to Rosedale's Allen Road basins, Superior basins, Mayer basin, and West basins when water supplies were available, and Rosedale would return water to the banking entities when requested. The project specifies that for each two acre-feet delivered to Rosedale by the banking entities, one acre-foot would be returned by Rosedale. Return of water to the banking entities would be made by exchange or through extraction of groundwater. Four extraction wells were constructed as part of the program. Water sources used for recharge operations and exchanges include the Kern River, CVP, or SWP water. An Addendum was prepared to clarify that the 13,300 AF extraction capacity identified within the MND was included as part of the 45,750 AFY extraction capacity as identified in the MEIR.

Paul Enns Ponds Negative Declaration

Rosedale adopted a Negative Declaration (ND) in 2002 (SCH #2002041087) analyzing the construction of approximately 170 acres of additional groundwater recharge ponds within Rosedale. The recharge ponds are used to recharge additional water supplies from sources historically available to Rosedale as well as future supplies for programs developed under the Conjunctive Use Program MEIR. The water sources for the recharge operations are the Kern River, Friant-Kern Canal, or the SWP.

Buena Vista/Rosedale Water Banking and Recovery Program EIR (Castaic Sale Program)

Buena Vista certified the Final EIR for the Buena Vista/Rosedale-Rio Bravo Water Banking and Recovery Program in 2002 (SCH #2002041044). The project is a joint endeavor between the two districts that involves the exchange, recharge, groundwater banking, and recovery of water by Buena Vista within the service areas of Buena Vista and Rosedale, together with delivery of recovered water to third-party buyers. Buena Vista acted as the Lead Agency and Rosedale acted as a Responsible Agency with respect to CEQA compliance for the project. The agreement includes two components: a groundwater banking agreement and a surplus water sales agreement. The Final EIR evaluated construction of three additional extraction wells, and the replacement of two existing extraction wells in Rosedale's West basins to supplement return capacity during years when SWP water is in short supply.

Delano-Earlimart Water Banking Program with Rosedale Negative Declaration

Rosedale adopted a ND in 2009 (SCH #2009071108) analyzing the water banking program for Delano-Earlimart Irrigation District (DEID) to bank a combination of CVP water and other water from outside its service area boundary into Rosedale. The banking program supplements DEID's

historic conjunctive use program and mitigates contract water supply losses. The project involves the water delivery by DEID to Rosedale for recharge through existing facilities available to Rosedale. Deliveries would occur when capacity is available but would not exceed 80,000 AF in any given year or 100,000 AF in total.

Kern-Tulare Water District and Rag Gulch Water District Groundwater Banking Negative Declaration

Rosedale adopted a ND in 2001 (SCH #2001041052) that analyzed the construction of three wells capable of producing 2,200 gallons per minute (gpm) of water and a 7,400 foot long 24-inch diameter pipeline between Allen Road and the CVC. The wells would be located west of Allen Road, between Stockdale Highway and Brimhall Road. The ND assessed a groundwater storage and extraction program that included recharging two acre-feet of water, and returning one acre-foot of water to the project participant, in addition to the construction of three extraction wells and associated pipeline facilities. The potential water sources for the recharge operations would be from the Kern River, Friant-Kern Canal Water and SWP. An Addendum No. 1 was prepared to clarify that the 7,200 AF extraction capacity identified within the negative declaration was included as part of the 45,750 AFY extraction capacity identified in the MEIR.

Glorious Land Company Mitigated Negative Declaration

Rosedale adopted a MND in 2003 that analyzed the recharge, groundwater banking, recovery and sale of water by Rosedale to GLC. Acquired waters will be captured and recharged within the Rosedale service area. Water included in the banking program will originate from imported supplies that Rosedale is able to put to beneficial use through direct or in-lieu recharge, or from captured local supplies that would have historically left Kern County. Rosedale would construct approximately ten extraction wells (eight new and two replacement wells) in the recharge basins along Goose Lake Slough, as well as associated pipelines connecting the wells to the Rosedale system and the CVC. As part of the agreement associated with the MND, Rosedale must provide for the sale and delivery of 220,000 AF of water to GLC over an initial term of 33 years (average 6,667 AFY). An Addendum to the MND was prepared to clarify that if Rosedale has sufficient water supply available, the agreement with GLC can be expanded to a total delivery of 262,500 AF.

Rosedale-IRWD Strand Ranch Integrated Banking Project EIR

The IRWD Strand Ranch Integrated Banking Project Final EIR (FEIR) and subsequent Addenda were prepared as stand-alone CEQA documents to address a new water storage banking project between IRWD and Rosedale (SCH #2007041080). The Strand Ranch FEIR is not tiered off of the MEIR. The recharge and extraction amounts analyzed in the FEIR are additive to the Conjunctive Use Program evaluated in the MEIR.

The Strand Ranch project augments the recharge and extraction capacity of Rosedale's Conjunctive Use Program and provides water supply reliability and redundancy to IRWD and its customers. The Strand Ranch FEIR analyzed developing groundwater banking facilities on the Strand Ranch for use by both Rosedale and IRWD. All groundwater banking facilities on the Strand Ranch are owned by IRWD and operated and maintained by Rosedale for the duration of the water banking agreement. Facilities were constructed to recharge and recover up to 17,500

AFY for IRWD. When not in use by IRWD, the facilities can be used by Rosedale to serve its existing commitments. IRWD has first priority use of the facilities. IRWD is provided a cumulative maximum banking allotment (maximum storage capacity) within Rosedale's Conjunctive Use Program of 50,000 AF.

Recharge water for the Strand Ranch project is secured and acquired by IRWD from various sources, potentially including federal, state, and wet-year local supplies. Similar to Rosedale's existing Conjunctive Use Program, water sources could include SWP water, pre-1914 water rights water, the CVP water, Metropolitan Water District (MWD) water, and high-flow Kern River water depending on annual availability. Although all water sources have not yet been secured, the Strand Ranch FEIR assessed impacts of purchasing and recharging water from the specific sources identified above.

In 2010, Addendum No. 1 to the FEIR was adopted by IRWD with the approval of Rosedale. The Addendum allows Rosedale and IRWD to modify the operation of the Strand Ranch project to allow both IRWD and Rosedale to recharge water offsite at other existing facilities within Rosedale's service area and recover it at Strand Ranch. The annual combined extraction limit at Strand Ranch of 17,500 AF is unchanged.

Rosedale-IRWD Stockdale Integrated Banking Project EIR

The Stockdale Integrated Banking Project FEIR was prepared in 2015 (SCH #2013091076) as a stand-alone CEQA document to address a new water storage banking project between IRWD and Rosedale. The Stockdale project is located adjacent to the Strand Ranch project. Similar to the Strand Ranch FEIR, the Stockdale FEIR also is not tiered off of the MEIR. The recharge and extraction amounts analyzed in the Stockdale FEIR are additive to the Conjunctive Use Program evaluated in the MEIR.

The Stockdale project allows both agencies to utilize available storage in the local San Joaquin Valley Groundwater Basin by developing groundwater banking facilities on up to three project sites located approximately six miles west of the City of Bakersfield. The proposed project sites consist of the following: Stockdale East; Stockdale West; a third project site that may be made up of non-contiguous parcels and that has yet to be specifically located; and the Central Intake Pipeline alignment. There is approximately 26,000 AF of available storage under Stockdale West and approximately 18,400 AF of available storage under Stockdale East. This is additive to Rosedale's existing 1.7 million AF of storage that underlies its services area, given that Stockdale East and Stockdale West are outside of Rosedale's boundary. However, Rosedale would manage the Stockdale Properties and their associated storage along with the Conjunctive Use Program. Once the third Stockdale project site has been identified, the associated storage underlying the site would be determined. Based on characteristics of Stockdale East and West, a third proximate site of up to 640 acres may have storage of approximately 51,200 AF.

Recharge capacities for the Stockdale Properties are estimated to be approximately 27,100 AFY for Stockdale West and approximately 19,000 AFY for Stockdale East. Recovery facilities would be designed to extract approximately 11,250 AFY at Stockdale West and approximately 7,500 AFY at Stockdale East. Once the third Stockdale project site has been identified, the associated

recharge and recovery capacities would be determined. Based on characteristics of Stockdale East and Stockdale West, a third proximate site of up to 640 acres may have recharge capacities of approximately 52,200 AFY and recovery of approximately 22,500 AFY. All groundwater banking facilities on Stockdale West are owned by IRWD and operated and maintained by Rosedale for the duration of the proposed project. All groundwater banking facilities on Stockdale East are owned, operated, and maintained by Rosedale.

The proposed Central Intake Pipeline connects the Goose Lake Slough to the CVC and serves as a conveyance for delivery of recharge water to Stockdale East and the existing Superior Basins, and for delivery of water pumped from Stockdale East wells and other Rosedale wells on the Superior Basins to regional conveyance facilities via the CVC. The Central Intake Pipeline generally runs along and between existing agricultural parcels, along the eastern edge of the Stockdale East property, and up to a new pump station and CVC turnout/turn-in facility. The Central Intake Pipeline is owned and operated by Rosedale.

Western Rosedale In-Lieu Service Area Project and Westside Recharge Ponds Expansion IS/MND.

The MND for the Western Rosedale In-Lieu Service Area Project and Westside Recharge Ponds Expansion was adopted in 2014 (SCH #2014101016). The Project includes construction and operation of approximately ten miles of water conveyance, pipelines and appurtenant facilities (including pumps, valves, flow meters, air vents, and connections to existing facilities) and construction and operation of two groundwater recharge ponds (totaling approximately 55 acres and located directly adjacent to Rosedale's existing Westside Recharge Ponds). Operation of the Project includes provision of water through proposed facilities and groundwater recharge via percolation into an existing sump. Operation of the Project facilities will increase Rosedale's ability to recharge water by up to 15,000 AFY (including 10,000 AF through in-lieu recharge) in addition to the amount covered by the MEIR. Project facilities will be operated consistent with the MEIR. The facilities associated with this project have not been built yet.

Commitments

Rosedale has entered into six water banking or sales agreements with partners, both within and outside of the County. Each agreement describes specific recharge, storage, and extraction limits. Rosedale has conducted CEQA assessments for each agreement under the umbrella of the overall program evaluated in the MEIR. As more agreements are executed, the Conjunctive Use Program becomes more fully subscribed, reducing the availability of facilities and capacity. This increases the need to integrate modes of operation to maximize efficient use of facilities and water when available.

A summary of the individual agreements follows. Each agreement establishes priority rights to certain facilities at certain times, but leaves capacity available for other program partners when not otherwise in use by the priority right holder. In addition, each agreement recognizes the need for compliance with stipulations of other agreements allowing for the use of facilities such as the CVC and Friant-Kern Canal.

Kern-Tulare Agreement

Rosedale entered into a 2:1 banking program agreement with the Kern-Tulare Water District (Kern-Tulare) in 2005. Kern-Tulare holds a federal water supply contract through the CVP and has access to high-flow water supplies from the Friant-Kern Canal. Under this agreement, Rosedale recharges high-flow CVP water when it is available and is obligated to return half back to Kern-Tulare under the conditions of the agreement. The agreement includes other water sources as well as including high-flow Kern River water and SWP water. To date, Kern-Tulare has delivered over 60,000 AF to Rosedale under this agreement, which has generated over 30,000 AF of water supply benefits to Rosedale.

Glorious Land Company Agreement

In 2005 Rosedale entered into an agreement with GLC, a private development corporation in the Coachella Valley in Southern California. Rosedale, after conducting a detailed analysis of its water supply and needs, identified a quantity of water which, through its access to high-flow Kern River water and other sources, was determined to be surplus to its needs. This agreement requires GLC to purchase a “minimum” amount of water each year and provides an option to purchase up to the “maximum” amount identified within the Agreement. The quantity of water to be sold to GLC started at 1,500 AF for 2007 and is increased each year to a final quantity, at 2035 of 16,500 AF. The total volume of water committed to the sale program is 260,000 AF. This agreement is for water sales and creates revenue for Rosedale. The agreement is for 30 years and was initiated in 2005.

As part of this agreement, 10 extraction wells were proposed. Three of the extraction wells would be located near the Paul Enns Ponds and the remaining wells would be constructed within the new recharge basins constructed for the project. Figure 2 identifies the location of these facilities.

Buena Vista Water Storage District/Castaic Lake Water Agency Agreement

Rosedale and Buena Vista entered into a water banking agreement whereby Buena Vista has the right to recharge and recover its exportable supplies within Rosedale, subject to capacity being available. This banking agreement provides for a 1:1 return, adjusted for certain evaporation and other losses. Water regulated through the program is intended for sale within or without the County, and to-date, approximately 11,000 AFY of the project yield has been subscribed by Castaic Lake Water Agency (Castaic). Rosedale provides SWP surface supplies to facilitate the delivery between Buena Vista and Castaic, while receiving a like amount of previously banked water from Buena Vista.

Delano-Earlimart Agreement

Rosedale has entered into a long-term agreement with Delano-Earlimart Irrigation District (DEID), the largest CVP contractor in the Bureau’s Friant-Kern Division. The agreement allows DEID to bank its CVP supplies in Rosedale. Rosedale, upon a request by DEID, would return one-half of the water to DEID. To date DEID has banked approximately 15,000 AF of water with Rosedale.

Arvin-Edison Agreement

Rosedale entered into a long-term agreement with Arvin-Edison Water Storage District (Arvin) under terms identical to those of its agreement with DEID. Rosedale and Arvin have an historic relationship with water banking activities dating back to the early 1990s. This relationship has generated over 60,000 AF of water supply benefits to Rosedale. Rosedale has not yet completed CEQA documentation for the full implementation of this program. Pending compliance with CEQA, recovery and return of water to Arvin are dependent on the availability of surplus capacity in existing recovery facilities.

Irvine Ranch Water District Strand Ranch Agreement

Rosedale entered into an agreement with the IRWD to bank water for its dry year supply requirements. The agreement allows for 50,000 AF of storage and 17,500 AFY return obligation assuming a positive storage balance.

Irvine Ranch Water District Stockdale Agreement

Rosedale entered into an agreement with the IRWD to bank water for its dry year supply requirements. The agreement allows for 76,000 AF of storage and 11,250 AFY return obligation assuming a positive storage balance.

2.2.3 Kern Delta Water District

Recharge, Extraction, and Conveyance Facilities

Kern Delta Water District's water conveyance systems are comprised of hundreds of miles of canals that supply an average of approximately 202,000 AFY from the Kern River and up to 25,500 AFY of water from the SWP. Kern Delta may divert water at three locations on the Kern River into the Carrier Canal and/or the River Canal. Kern Delta's in-District water conveyance facilities are comprised of five canal systems – Kern Island, Buena Vista, Stine, Farmers, and Eastside Canals – that are connected to the Kern River via the Carrier Canal and River Canal (**Figure 3**). The five canals, which are unlined and allow some percolation to groundwater, have historic utility service areas and specific diversion rights from the Kern River.

Kern Delta is contracted with KCWA to receive a maximum amount of 25,500 AFY of SWP water (Todd, 2013). Through a water exchange agreement with Buena Vista, Kern Delta trades its annual SWP entitlement for an equal amount of Kern River water.

Landowners within Kern Delta augment surface water supplies with groundwater, and hundreds of private wells have been drilled within the District boundary. Wells within Kern Delta are used primarily for irrigation where surface water deliveries are limited. Groundwater is also used for non-irrigation agriculture, including dairies, and for municipal and industrial (M&I) uses. In addition, KDWD pumps a relatively small amount of groundwater from District-owned wells to supplement surface water deliveries.

In order to regulate the fluctuation in water supplies to more reliably meet local demand, KDWD has developed a groundwater banking program with The Metropolitan Water District of Southern California (Metropolitan). The groundwater banking program has built-out 814 acres of spreading basins in the Kern Island, Buena Vista, Stine, Farmers, and Eastside service areas (Figure 3).

Infiltration rates vary from basin to basin, but average about 0.35 feet per day (ft/day). This is equivalent to a monthly recharge capacity of about 8,700 acre feet (AF)/month (Todd Engineers, 2011). Additional recharge capacity also exists within the unlined canals used to convey water through Kern Delta. During winter months (when recharge water is available and irrigation demand is relatively low) more than 4,000 AF/month could be recharged along the conveyance systems alone (Todd Engineers, 2011).

As part of the banking project with Metropolitan, Kern Delta has constructed or purchased 18 wells to recover banked groundwater. About one-half of these wells are adjacent to two of the larger recharge basins with the remaining wells clustered in a wellfield in the northern portion of the District (Figure 3). KDWD can use these wells to recover banked water for Metropolitan or to pump groundwater for Kern Delta use. A total of 32 wells are planned at project buildout (KDWD, 2002).

TABLE 2
SUMMARY OF KERN DELTA FACILITIES AVAILABLE TO THE KFA INTEGRATION PROGRAM

| Conveyance | Storage | Recharge | Extraction |
|---|---|---|---|
| <ul style="list-style-type: none"> • Kern Island Canal • Farmers Canal • Stine Canal • Buena Vista Canal • Eastside Canal • Eastside Pipeline | <ul style="list-style-type: none"> • Buena Vista Canal Regulating Reservoir (RR)/Buena Vista Canal Terminal Reservoir (TR) • Stine Canal RR/Stine Canal TR • Farmers Canal RR/Farmers Canal TR • Kern Island Main Canal RR • Eastside Canal RR | <ul style="list-style-type: none"> • Buena Vista Storage and Recharge Reservoir (SRR) • Kern Island Main SRR • Buena Vista Spreading Basin (SB) • Stine Basin • Farmers Basin • Kern Island Basin • Eastside Basin • Branch 1 Spreading Facility • Howard Frick Spreading Facility | <ul style="list-style-type: none"> • 18 Extraction wells |

Summary of Certified CEQA Documents

Acquisition of Kern Island Water Company EIR

Kern Island Water Company was formed in 1966 in accordance with a directive (Decision No. 71684) of the Public Utilities Commission (Boyle, 1975). The formation of the Kern Island Water Company was the result of a merger of five canal companies: Kern Island Canal Company, Farmers Canal Company, Stine Canal Company, Buena Vista Canal Company, and East Side Canal Company. These canal companies, with the exception of East Side Canal Company, had pre-1914 appropriative rights to divert water from the Kern River. Kern Island Water Company inherited all historical agreements for delivery and allocation of water held by the five canal companies.

The EIR for the acquisition of Kern Island Water Company was certified in 1975, and joined the water rights and facilities of Kern Island Water Company with those of Kern Delta Water District (excluding the Ashe Water Service Area). The project consisted of the legal transfer of Kern

Island's water assets, as well as the construction of infrastructure improvements to join the new facilities to Kern Delta's existing ones. The acquisition brought over 200 miles of canals and laterals under Kern Delta's control to deliver more water from the Kern River, SWP, and other local sources to the District's customers. The stated purpose of the project was to place the assets of Kern Island into Kern Delta's ownership and control in order to protect the water rights of lands served. Additionally, the project provided much needed improvements and maintenance to Kern Island's facilities.

Systems Improvement Project Supplemental EIR

The Systems Improvement Project EIR was authorized by Kern Delta's Board of Directors in 1980 to identify the environmental impacts of construction and operation of facilities originally proposed as the "1979 Systems Improvement Project" as a supplement to the certified Final EIR for the acquisition of Kern Island Water Company. After a period of operation of Kern Island facilities to determine any deficiencies, the need for system improvements and regulatory storage for each canal had been confirmed. The Systems Improvement Project included the construction of regulating reservoirs, specific canal modifications, and dual-purpose storage/groundwater recharge reservoirs that totaled more than 200 acres in Kern Delta's service area. The project would increase Kern Delta's storage capacity by approximately 260 AF in regulating and terminal reservoirs, and created two storage/groundwater recharge zones totaling 105 surface acres for percolation. The Supplemental EIR was circulated for public review and submitted to the State Clearinghouse (SCH # 79110903), but was not certified at that time. Kern Delta tabled the project for approximately 25 years after threats of litigation from the North Kern Water Storage District and the City of Bakersfield for a failure to adequately assess impacts to groundwater resources, during which time these claims were negotiated, mediated, and litigated.

Water Banking and In-Lieu Water Supply Project EIR and Addendum

The Final EIR for the Water Banking and In-Lieu Supply Project was approved in November 2002 (SCH #2001011103). The project was proposed initially by Kern Delta to provide for the import of supplies from the SWP and other resources when they are available for two purposes: (a) to store these supplies in the Kern Delta groundwater basin and/or (b) deliver these supplies straight to water rights holders for use in-lieu of groundwater extraction. The project also served as a method to provide water banking services for Metropolitan using Kern Delta's groundwater storage capacity. The project required the construction of new infrastructure, including conveyance facilities, spreading basins, a pipeline delivery system for in-lieu deliveries, and extraction wells. All told, the project could include a nine mile conveyance pipeline connecting the California Aqueduct to the Stine Canal, a seven mile pipeline connecting in-lieu water users to the Arvin-Edison Canal, 5 pump stations, 32 extraction wells, and five spreading basins totaling more than 800 acres.

An Addendum to the Final EIR was approved in December 2002 in order to clarify the mechanisms by which the project would provide for the return of banked water supplies to the California Aqueduct. Through the Addendum, Kern Delta limited the method by which it would return Metropolitan's banked water to three options: an exchange of banked water for Kern Delta's SWP project water, a return pursuant to the exchange agreement with Improvement District No. 4 (ID4), and/or the direct recovery and delivery of banked water to the California

Aqueduct. A Subsequent EIR was not required because the operations scenario was fully evaluated in the original EIR.

Kern River Water Allocation Plan EIR

Kern Delta's Kern River water rights were challenged in 1995. After years of litigation a final judgment was entered in 2007. The final judgment left Kern Delta with preserved entitlements that required management to avoid further forfeiture. To this end the District developed its Kern River Water Allocation Plan (WAP). Initial efforts to satisfy CEQA requirements relating to the WAP were unsuccessful. However, the combination of this District's 2012 Final EIR and its 2017 Final Supplemental EIR has met all CEQA requirements and the WAP has been fully implemented (SCH #2011041082). No new facilities were constructed as a result of the WAP. The WAP identifies the equitable criteria that provide for economical and efficient distribution and use of water within the District according to the California Water Code. The Plan details Kern Delta's intentions to vary its historic Kern River water release practices. In addition to maintaining Kern Delta's water rights, the WAP is designed to meet existing and underserved demand in the District's service area, maintain sustainable groundwater resources, reduce the decline of groundwater levels, equitably distribute water among its historic service areas, and serve the growing water demands of its customers.

Commitments

Buena Vista Water Storage District Exchange Agreement

Under this agreement, some of Buena Vista's Kern River entitlement water is delivered to Kern Delta in exchange for an equal amount of Kern Delta's SWP water. The exchange agreement between the two water districts covers all of KDWD's SWP entitlement of 25,500 AFY. The purpose of this exchange is to enable Kern Delta to receive water it has contracted from the state even though it has no direct capacity to turn water out of the state aqueduct, to which Buena Vista has direct access.

2.2.4 Henry Miller Water District

Recharge, Extraction, and Conveyance Facilities

Henry Miller's facilities are composed primarily of canals, lift stations, groundwater extraction wells, and California Aqueduct or Buena Vista Aquatic Recreation Area (BVARA) turnouts (see **Figure 5**). Henry Miller's distribution system is made up of roughly 85 miles of canals and lift stations with a capacity of 50,000 AFY, all built before CEQA was enacted, as well as the Alejandro Canal (see **Figure 4**). The District sources its water locally from the Kern River and the Friant-Kern Canal, as well as the California Aqueduct using Turnouts HM #1, HM #2, and BV #5 (see **Figure 4**). The District's firm SWP supply is 35,500 AFY and average Kern River supply is roughly 5,000 AFY. Henry Miller groundwater well system is made up of 28 wells with a production capacity of roughly 30,000 AFY to 34,000 AFY. These wells were drilled by JG Boswell, a private landowner, or its predecessors, and thus were not subject to CEQA. Some of these wells were turned over to HMWD ownership when the district was formed, while the remainder are simply operated by Henry Miller on behalf of Boswell.

TABLE 3
SUMMARY OF HENRY MILLER FACILITIES AVAILABLE TO THE KFA INTEGRATION PROGRAM

| Conveyance | Recharge/Storage | Extraction |
|---|---|---|
| <ul style="list-style-type: none"> - Alejandro Canal - Distribution Canals/Lift Stations - Aqueduct Turnouts HM #1, HM #2, BV #5 | <ul style="list-style-type: none"> • Buena Vista Aquatic Recreation Area (BVARA) | <ul style="list-style-type: none"> • 28 production wells |

Summary of Certified CEQA Documents

Henry Miller's distribution system was built before CEQA was enacted. As such there are no certified CEQA documents to include in this compliance summary.

Commitments

None.

2.2.5 Buena Vista Water Storage District

Recharge, Extraction, and Conveyance Facilities

Buena Vista's water management facilities are comprised of a network of canals and pipelines that deliver surface water to fulfill approximately 75% of the irrigation demand in its jurisdiction; the remaining demand is met with groundwater, which is pumped either by Buena Vista itself or local water rights holders (see **Figure 5**). The District canals were all built prior to the enactment of CEQA. The District's 30 miles of pipelines which serve primarily the northern half of the Buttonwillow Service Area are recent additions, all covered by CEQA documents. The District controls an average entitlement of nearly 150,000 AFY of water from the Kern River, as well as an annual entitlement of 21,300 AFY of surface water and a surplus of 3,750 AFY of SWP supplies from KCWA. Buena Vista has access to its SWP supplies via five turnouts along the California Aqueduct, and because of its geographic location is able to exchange Kern River water for SWP water with other KCWA members.

TABLE 4
SUMMARY OF BUENA VISTA FACILITIES AVAILABLE TO THE KFA INTEGRATION PROGRAM

| Conveyance | Recharge/Storage | Extraction |
|---|---|--|
| <ul style="list-style-type: none"> - East Side Canal - West Side Canal - Main Canal - Main Drain Canals - Alejandro Canal - Goose Lake Canal - Outlet Canal - Maples Canal - California Aqueduct Turnouts: Elk Reserve Turnouts; - Buena Vista Turnout No. 7 - Semitropic Pipeline and Turnout - 7th Standard Pipeline - Northern Area Pipeline | <ul style="list-style-type: none"> - Palms Groundwater Basins - Kern River Bypass Recharge Facility - Kern River Flood Control Canal - Tule Elk Reserve | <ul style="list-style-type: none"> - Palms Groundwater Project Extraction Wells and Treatment Facilities - Landowner wells |

Summary of Certified CEQA Documents

Buena Vista Water Management Program – Final EIR

Buena Vista created its Water Management Program (WMP) in an effort to maximize the efficient use of its assets and to more effectively manage its water supplies and programs. Buena Vista completed the Final EIR for the WMP in 2009 (SCH #2009011008). The WMP is broken down into four specific projects. The first is the Groundwater Recharge and Recovery, which is designed to improve infiltration and storage of groundwater and surplus water supplies. The second is the Water Exchange Project, which is designed to better accommodate Buena Vista's water users during dry years via exchanges with other water entities. Next is the Conservation Easement Water Acquisition and Management project, which focuses on water conservation by acquiring and managing water service rights on lands that are not already subject to conservation easements. Finally, the Brackish Groundwater Remediation Project increases available water supplies in the Buttonwillow Service Area for agricultural use by extracting and transporting brackish groundwater and shallow perched groundwater.

Water-Use and Irrigation Efficiency Project: Elk Reserve Turnouts, West Side Canal Lining, and Semitropic Pipeline Turnout

Buena Vista prepared an Initial Study/MND in 2013 for the Water-Use and Irrigation Efficiency Project (SCH #2013081018), which includes turnouts, pumps, and canal lining to more efficiently and effectively deliver water within the service area. The Elk Reserve Turnouts consist of three turnout connections and a pump station (SWP BV2 Turnout, Well 2 Turnout, Booster Pump Turnout) along the eastern side of the East Side Canal to provide water to the Tule Elk State Natural Reserve. The Semitropic Pipeline Turnout discharges water from the Semitropic Pipeline to the Northern Area Pipeline for delivery to growers in the District and the Main Drain Canal for conveyance to the Kern National Wildlife Refuge.

Palms Groundwater Banking Project

Buena Vista prepared an Initial Study/MND in 2015 for the Palms Groundwater Banking Project (SCH #2015121030), which is a groundwater replenishment and water banking project that will cover approximately 1,160 acres and will include features needed to apply surface water for groundwater recharge as well as facilities needed for recovery and treatment of stored groundwater. The Project involves multiple stages: 1) construction of recharge facilities, 2) installation of pumps in existing wells and approximately 10 miles of pipeline, 3) construction and equipping additional recovery wells with associated piping, and 4) water treatment facilities if needed. High quality water recharged by the Project will flow to aquifers that are sources for domestic and municipal wells providing water to residents of Taft, Tupman, and to the disadvantaged community of Buttonwillow, and to replenish groundwater under the Tule Elk State Natural Reserve.

The objectives of the Project include: (1) Increase conjunctive management on the west side of Kern County by expanding the area's ability to accept surface water for groundwater recharge during periods when surface water is available. Groundwater stored by the Project will be available to meet demands during periods when supply of surface water is limited. (2) Reduce agricultural demand by replacing 1,160 acres of irrigated farmland with spreading grounds. (3) Raise groundwater elevations in the Project area.

Project benefits fall into following three primary categories: (1) benefits to groundwater users and prospective banking partners due to better management of groundwater elevations; (2) habitat benefits as a result of more availability for water transfers to the Tule Elk Reserve and (3) water quality improvements due to reduced leaching of contaminants to groundwater.

Pipeline Projects

- **7th Standard Pipeline Project MND** (SCH #2018091030) September 14, 2018: Construction activities would include installing approximately 12 miles of buried pipe, up to 36 inches in diameter, along a maximum construction corridor width of 50 ft. Pipes would be installed by excavating open trenches. For pipes less than 24 inches in diameter, trenches would be 3 ft wide and 5 ft deep; for pipes greater than 24 inches in diameter, trenches would be 5 ft wide and 6 ft deep. Lateral pipes 18-24 inches in diameter would be installed to connect 18 turnouts to the 7th Standard Pipeline.
- **Northern Area Pipeline Eastern Extension MND** (SCH #2018011037) January 2018: Construction of the project involves the installation of approximately 5 miles of buried pipeline, varying size, between 12 and 36 inches in diameter. The pipeline would be buried adjacent to existing right-of-way and field roads. The project is estimated to conserve 3,623 AFY through seepage reduction and 2,210 AFY by improved measurements and controls, for a total annual savings of 5,833 AF.
- **BVWSD Northern Area Project Southern Extension MND** (SCH#2016081055) August 2016: In 2016, Buena Vista completed the Northern Area Pipeline project (NAP), approximately 20 miles of new buried pipeline. The Southern Extension project, an extension of the NAP, is consistent with the District's overall water conservation and management program. The southern portion of the NAP would begin at Vlasnik Road, and continue south for an additional 5 miles. The project is designed to further improve the District's water-use efficiency
- **Northern Area Project MND** (SCH #2014091060) September 2014: The project is located 16 miles west of Bakersfield within the Buttonwillow Service Area of Buena Vista, and primarily entails the installation of buried pipeline. The pipe would vary in size, between 21 and 63 inches, and be primarily buried adjacent to the Main Drain Canal and other district facilities, including portions of the West Side and East Side Canals. The new pipeline would be installed largely within the existing right-of-way of the Main Drain and other district facilities. Laterals that deviate from district facilities would be located adjacent to field roads or other geographical features that minimize impacts to conservation and farming. The project construction would include activities consistent with digging, trenching and excavation of soil to install the new pipeline.

Groundwater Transfer Projects

- **2006 Groundwater Transfer Program MND** (SCH #2006101116) February 2008: Buena Vista's proposed 2006 Groundwater Transfer Program involves the exchange of up to 50,000 AF of Buena Vista's State Water Project (SWP) contract water for an equivalent quantity of previously imported and recharged 2005-2006 SWP Article 21 water. Assuming that SWP Article 21 water banked during 2005-2006 is an exportable water supply as declared by jurisdictional agencies (i.e., California Department of Water Resources, Kern County Water Agency, and the State Water Contractors), Buena Vista proposes using all or a portion of the 50,000 AF account for possible future water sales to the Environmental Water Account

(EWA) and/or to other parties, over a period of several years.¹ The area proposed to be used for recovery pumping of recharged groundwater is within the Buttonwillow service area (generally southerly of Vlasnik Road) and the Maples service area. During the course of the Program, the District will continue to monitor groundwater elevations and quality and coordinate operations as described in the Groundwater Management Program as well as required by the Kern Fan Monitoring Committee under the terms of the Memorandum of Understanding Regarding Operation and Monitoring of the Buena Vista Water Storage District Groundwater Banking Program.

- **2002 Groundwater Transfer Program MND (SCH #2002011120)** April 2002: Buena Vista's 2002 Groundwater Transfer Program (Program) involves the exchange of up to 25,000 AF of Buena Vista's entitlement to State Water Project (SWP) water for pumping and local use of the equivalent quantity of recharged 1995-1999 SWP water or high-flow Kern River water from wells owned and operated by BVWSD and local landowners. The District received and recharged approximately 102,000 acre feet of SWP water from 1995-1999. Assuming that SWP water banked during such years is an approved Environmental Water Account (EWA) water supply by the California Department of Water Resources (DWR) and the State Water Contractors, Buena Vista proposes using up to 25,000 acre feet of this supply for purposes of its 2002 water transfer. The exchanged SWP water will be made available for sale to EWA and to other water users

Other Projects

- **Second Point Metering Structure Negative Declaration (SCH #1984090305)** September 1984: Construction of a reinforced concrete measuring weir, 150 feet in length, with reinforced concrete headwalls and a structural steel walkway to replace existing, which is located approximately 0.75 mile upstream of the proposed site.
- **Completion of Kern River Bypass Recharge Facility Negative Declaration (SCH #1997031040)** March 1997: Restoration and construction of levees in order to more effectively recharge surface waters into the aquifer below.

Commitments

Buena Vista Water Storage District/Castaic Lake Water Agency Agreement

Rosedale and Buena Vista entered into a water banking agreement that was included in the Buena Vista Water Management Program EIR whereby Buena Vista has the right to recharge and recover its exportable supplies within Rosedale, subject to capacity being available. This banking agreement provides for a 1:1 return, adjusted for certain evaporation and other losses, and has a capacity of up to 80,000 AFY of recovery. However, the agreement is limited to 200,000 AFY of

¹ The Environmental Water Account (EWA) is a cooperative CALFED management program to protect the native fish species of the Bay-Delta estuary through environmentally beneficial changes in the federal Central Valley Project (CVP) and the State Water Project (SWP) operations at no uncompensated water cost to the CVP/SWP water users. Five Federal and State agencies are involved in administering the EWA. DWR and Reclamation, the "Project Agencies," are responsible for acquiring water assets and for storing and conveying the assets through use of the SWP and CVP facilities. The three "Management Agencies," DFG, USFWS, and NOAA Fisheries, manage the EWA assets to protect and restore fish populations. All five EWA agencies are responsible for the day-to-day program management. The EWA consists of two primary elements: (1) assisting in fish population protection and recovery for at-risk native fish species; and (2) increasing water supply reliability by reducing uncertainty associated with fish protection and recovery actions. The EWA enables timely reductions in export pumping at the Sacramento-San Joaquin Delta pumps, operated by DWR and Reclamation, to improve survival of and reduce injury to at-risk native fish species. The EWA acquires water to replace the supplies that would have otherwise been diverted by the SWP and CVP so that water supplies delivered to their contractors are not interrupted or reduced because of the Delta export pumping change.

maximum storage for Buena Vista. Water regulated through the program is intended for sale within or without the County and, to date, approximately 11,000 AFY of the project yield has been subscribed by Castaic Lake Water Agency (Castaic). Rosedale provides SWP surface supplies to facilitate the delivery between Buena Vista and Castaic, while receiving a like amount of previously banked water from Buena Vista.

Buena Vista Water Storage District/West Kern Water District

In 1983, Buena Vista entered into a banking and groundwater recovery program with the West Kern Water District (West Kern). West Kern transfers all or a portion of its SWP water to Buena Vista for Buena Vista to bank in the area of West Kerns Wells. West Kern has been pumping here for close to 100 years, and the water Buena Vista delivers is referred to as Replacement Water for West Kern to pump. Buena Vista maintains a positive balance in this account. Buena Vista attempts to use high flow Kern River water for banking.

Buena Vista Water Storage District/Kern Delta Water District Exchange Agreement

Under this agreement, some of Buena Vista's Kern River entitlement water is delivered to Kern Delta in exchange for an equal amount of Kern Delta's state entitlement water. The average exchange between the two water districts is approximately 25,000 acre-feet. The purpose of this exchange is to enable Kern Delta to receive water it has contracted from the state even though it has no capacity to turn water out of the state aqueduct, to which Buena Vista has direct access.

2.3 Integration Objectives and Benefits

Integration of the existing facilities described above in Section 2.2 would provide numerous benefits to the distribution and reliability of water resources delivery, including the following:

- Maximize the use of water supplies and recharge, extraction, and conveyance facilities available to the KFA districts
- Reduce the need to build new facilities that could occupy prime agricultural farmland
- Achieve energy efficiencies by optimizing water conveyance, recharge, and storage and reducing deep well pumping
- Provide operational flexibility to increase recharge and reduce recovery in critical areas to avoid, prevent or mitigate localized impacts to groundwater levels
- Improve groundwater quality by increasing recharge with surface waters that are lower in constituent concentration and load than groundwater
- Enhance flood control capacity by potentially diverting more water from the Kern River during high flow events relative to existing conditions
- Support continued expansion of groundwater banking agreements
- Facilitate basin-wide groundwater best management practices
- Assist in stabilizing costs of KFA district operations to landowners by optimizing operations and reducing need for redundant facilities, as well as maximizing the use of existing supplies thus avoiding additional purchases of replacement water

2.4 Project Implementation

The proposed project would allow the KFA member districts to integrate their various water management activities. The proposed integration would allow the KFA member districts to maximize flexibility to exchange, transfer, recharge, recover, and operate individual recharge and water banking programs as one comprehensive program. The proposed integration would allow for reciprocal use of facilities among the member districts, with such use restricted to the existing approved capacity limitations and operational constraints of the individual projects and programs. The proposed integration would not require construction of new facilities, but may result in greater use of existing facilities than would occur in the absence of the proposed integration.

For each KFA member district, the proposed integration would occur on a case-by-case basis, as opportunities arise for use of other district facilities when water is available. Approval from the KFA Board of Directors would not be required for activities carried out by individual member districts under the proposed integration. However, some transactions and physical movement of water among district facilities may require coordination with the KCWA.

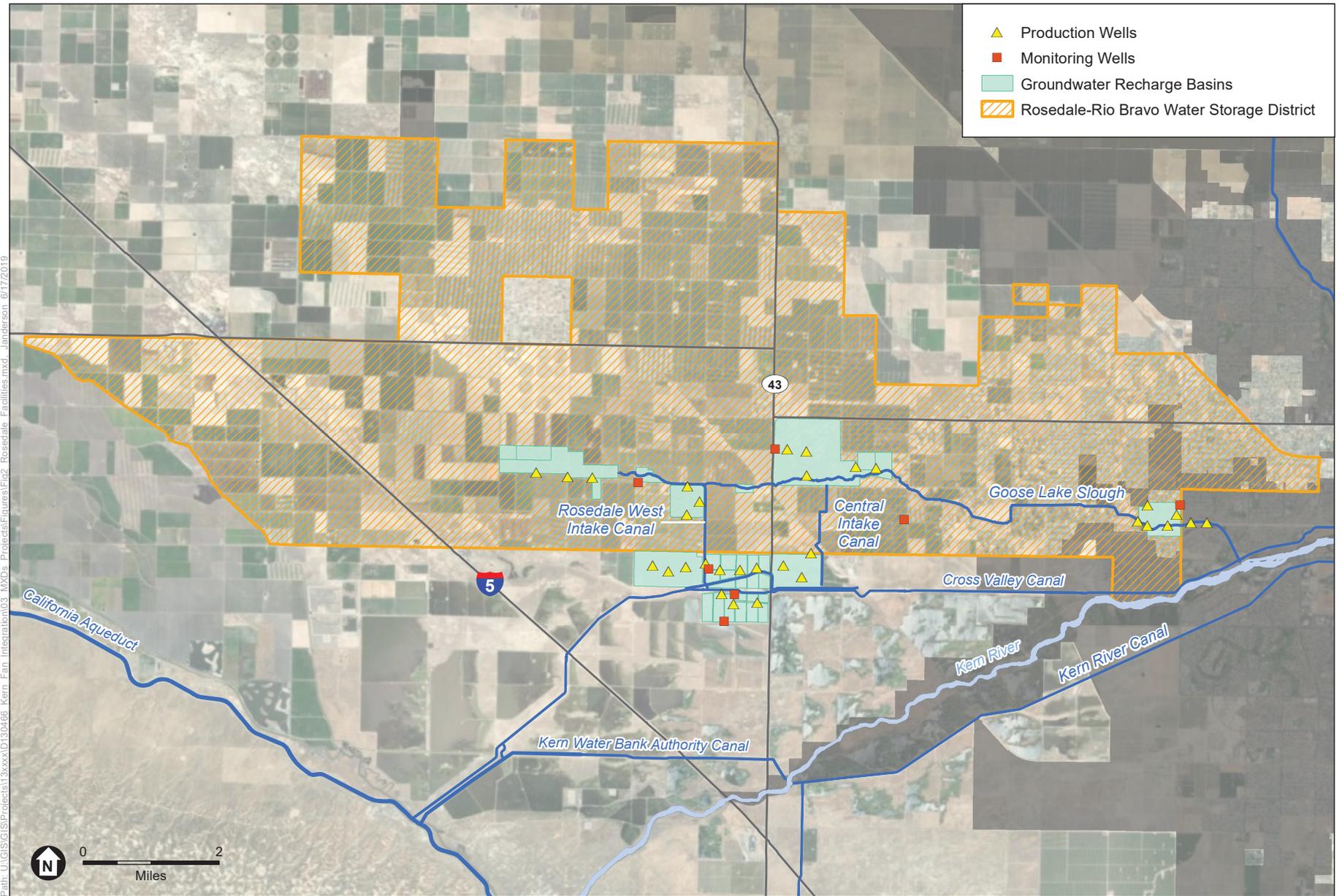
The proposed integration does not guarantee or require annual reciprocal use of facilities or amounts of water to be exchanged, transferred, recharge, or recovered. The KFA member districts would contact each other directly with specific requests for integrated water management activities. Agreements would be approved and processed as necessary by the individual districts involved, per regulation or law, and specific terms would be negotiated on a case-by-case basis, with approval by the member districts' Board of Directors as necessary.

References

- Boyle Engineering Corporation, Final Master Environmental Impact Report for the Groundwater Storage, Banking, Exchange, Extraction & Conjunctive Use Program, July, 2001.
- Boyle Engineering Corporation, Rosedale-Rio Bravo Water Storage District Groundwater Recharge Facilities in West Side of Rosedale-Rio Bravo Water Storage District, Negative Declaration, April 2002.
- Boyle Engineering Corporation, Rosedale-Rio Bravo Water Storage District Kern Tulare WD and Rag Gulch WD Groundwater Banking Project in Rosedale-Rio Bravo WSD, Negative Declaration, May 2001
- Buena Vista Water Storage District and Rosedale-Rio Bravo Water Storage District, Buena Vista/Rosedale-Rio Bravo Water Banking and Recovery Program, Final Environmental Impact Report, September 2002
- Buena Vista Water Storage District, Palms Groundwater Banking Project, Final Mitigated Negative Declaration, 2015.
- Buena Vista Water Storage District, Water-Use and Irrigation Efficiency Project, Elk Reserve Turnouts, West Side Canal Lining, and Semitropic Pipeline Turnout, Mitigated Negative Declaration, 2013.

- Buena Vista Water Storage District, Water Management Program, Final Environmental Impact Report, 2009
- Environmental Science Associates, Strand Ranch Integrated Banking Project, Final Environmental Impact Report, May 2008.
- Environmental Science Associates, Addendum No. 1 Strand Ranch Integrated Banking Project, Final Environmental Impact Report, 2010.
- Environmental Science Associates, Stockdale Integrated Banking Project, Final Environmental Impact Report, 2015.
- Environmental Science Associates, Kern Delta Water District, Water Allocation Plan Final Environmental Impact Report, 2017.
- Environmental Science Associates, Kern Delta Water District, Water Allocation Plan Final Supplemental Environmental Impact Report, 2017.
- Frederick, Kenneth D., Scarce Water and Institutional Change, Routledge, 2013.
- Rosedale-Rio Bravo Water Storage District, Addendum No. 1 to GLC Water Banking and Recovery Program, Negative Declaration, December 2004.
- Rosedale-Rio Bravo Water Storage District, Addendum No. 1 to Master Final Environmental Impact Report for the Groundwater Storage, Banking, Exchange, Extraction & Conjunctive Use Program, May, 2003
- Rosedale-Rio Bravo Water Storage District, Addendum No. 2 to Master Final Environmental Impact Report for the Groundwater Storage, Banking, Exchange, Extraction & Conjunctive Use Program, September, 2009
- Rosedale-Rio Bravo Water Storage District, Addendum No. 1 to Negative Declaration for the Groundwater Banking Project – Allen Road Wellfield, September 15, 2009.
- Rosedale-Rio Bravo Water Storage District, Addendum No. 1 to Rosedale-Rio Bravo Water Storage District Kern Tulare WD and Rag Gulch WD Groundwater Banking Project in Rosedale-Rio Bravo WSD, Negative Declaration, September 2009.
- Rosedale-Rio Bravo Water Storage District, GLC Water Banking and Recovery Program, Initial Study/Mitigated Negative Declaration, September 2003.
- Rosedale-Rio Bravo Water Storage District, GLC Water Banking and Recovery Program, Negative Declaration, September 2003.
- Rosedale-Rio Bravo Water Storage District, Negative Declaration for the Groundwater Banking Project – Allen Road Wellfield, September 15, 2003.
- Todd Engineers, 2013. *Final Groundwater Management Plan Update*, Kern Delta Water District, October 11, 2013.

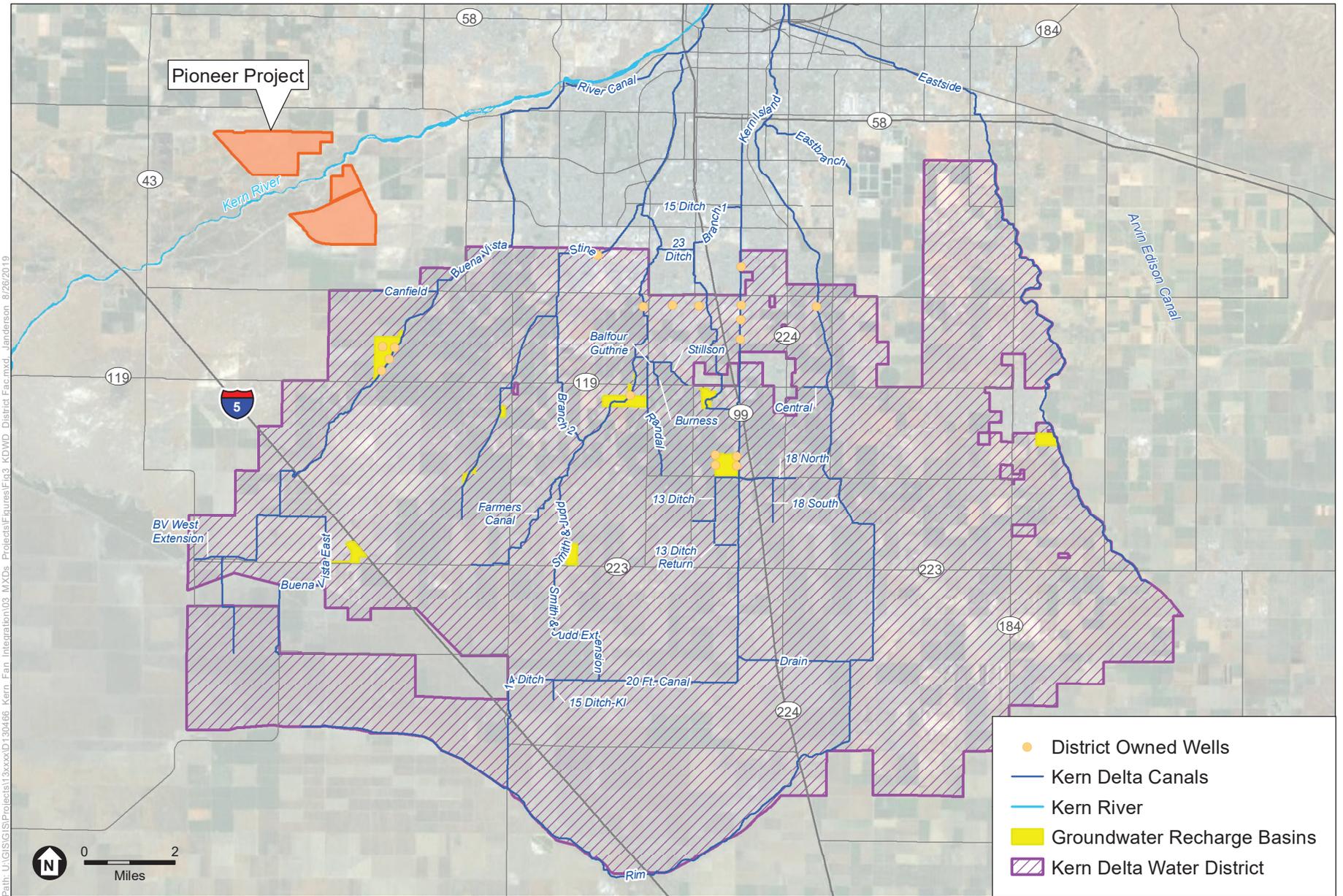
U.S. Department of the Interior Bureau of Reclamation, Delano-Earlimart Irrigation District and Rosedale-Rio Bravo Water Storage District Banking Program 2010-2026, Final Environmental Assessment, December 2009.



SOURCE: ESRI; Kern County

Kern Fan Authority Integration

Figure 2
Rosedale-Rio Bravo Water Storage District Facilities

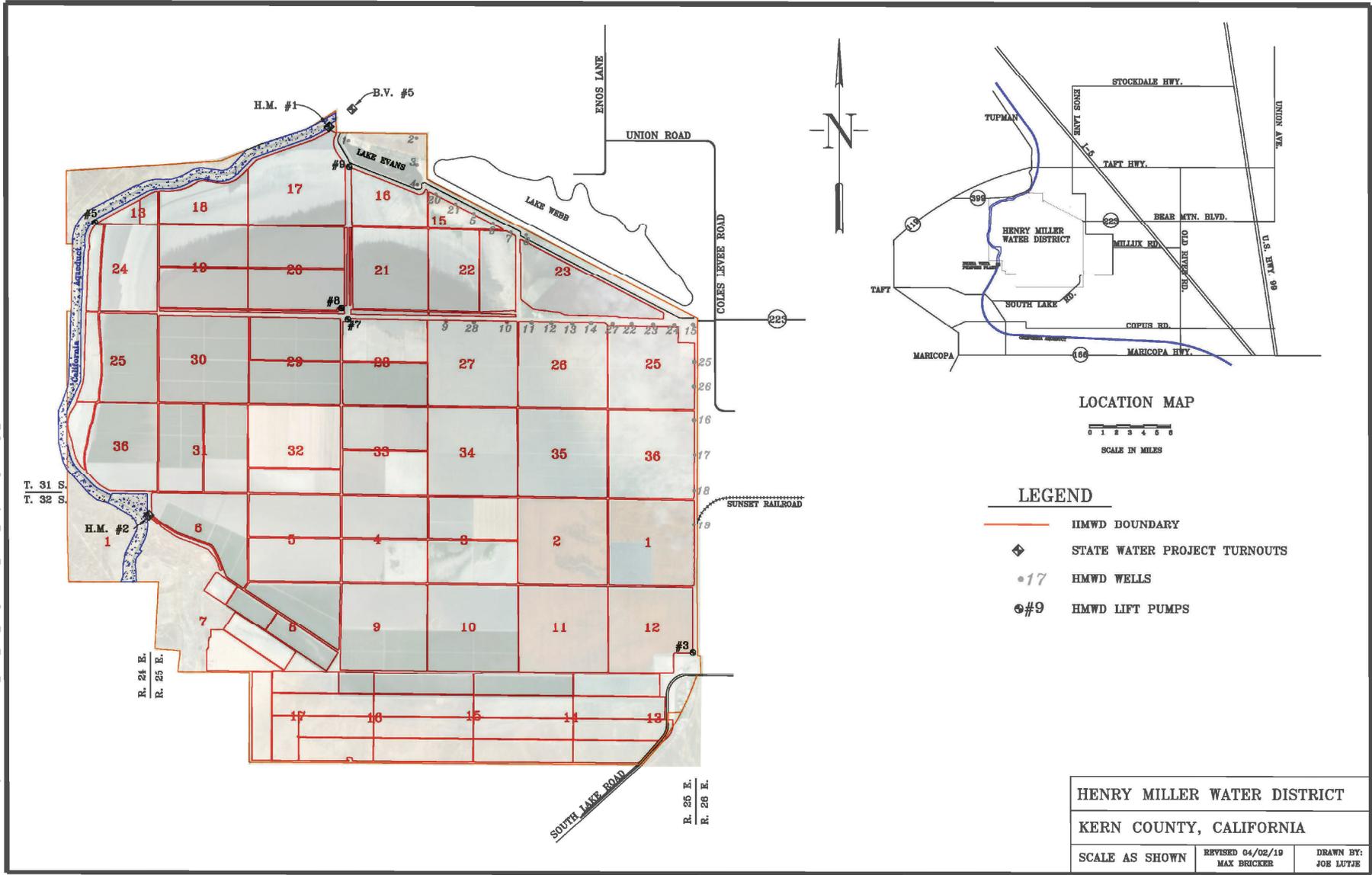


SOURCE: ESRI; ESA

Kern Fan Authority Integration
Figure 3
 Kern Delta Water District Facilities



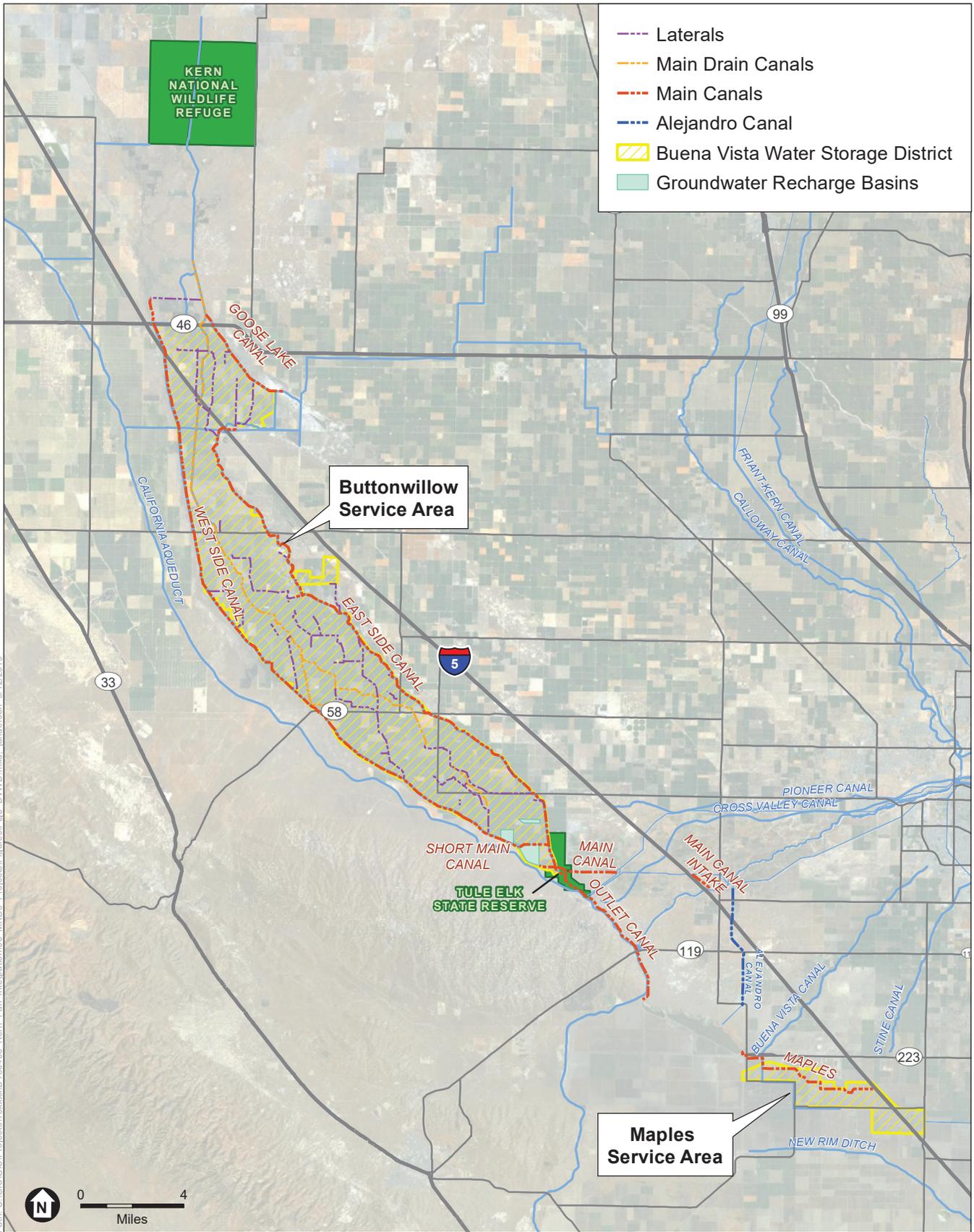
Path: U:\GIS\GIS\Projects\13\xxxx\130466_Kern_Fan_Integration\03_MXDs_Projects\Figures\Fig4_HMWD.mxd_Janderson_4/24/2019



SOURCE: Henry Miller Water District; ESA

Kern Fan Authority Integration
Figure 4
 Henry Miller Water District Facilities





SOURCE: ESRI; Buena Vista Water District

Kern Fan Authority Integration

Figure 5
Buena Vista Water Storage District Facilities

CHAPTER 3

Initial Study

1. **Project Title:** Kern Fan Authority Integration Project
2. **Lead Agency Name and Address:** Kern Fan Authority
3. **Contact Person and Phone Number:** Eric Averett
(661) 589-6045
4. **Project Location:** Kern County
5. **Project Sponsor's Name and Address:** Kern Fan Authority Member Agencies:
 - Rosedale-Rio Bravo Water Storage District, 849 Allen Road Bakersfield, CA 93314
 - Kern Delta Water District, 501 Taft Hwy, Bakersfield, CA 93307
 - Henry Miller Water District, P.O Box 9759, Bakersfield, CA 93389
 - Buena Vista Water Storage District, P.O Box 756, Buttonwillow, CA 93206
6. **General Plan Designation(s):** Various
7. **Zoning:** Various

8. Description of Project:

The Kern Fan Authority (KFA) is comprised of four separate water districts in Kern County, California: Rosedale-Rio Bravo Water Storage District (Rosedale), Kern Delta Water District (Kern Delta), Henry Miller Water District (Henry Miller), and Buena Vista Water Storage District (Buena Vista). The KFA is proposing the Kern Fan Integration (proposed Project) to integrate member districts' various water management activities to achieve more cost efficient operations and flexible response capabilities. Over the last decade, the member districts of the KFA have developed various water management and groundwater banking programs, and each has its own degree of water conveyance, recharge, extraction, and storage infrastructure. By integrating their respective water management activities, Rosedale, Kern Delta, Buena Vista, and Henry Miller (collectively referred to throughout this document as the KFA) will be able to maximize their ability to exchange, transfer, recharge, recover, and operate individual water management activities as a single comprehensive program. This integration would create

opportunities for the reciprocal use of facilities and infrastructure among the four members and would not require any new construction. In addition, this integration would be limited by the existing capacity and operational constraints of the individual programs of each agency.

The proposed Project would not require or involve the construction of any new physical facilities or new water distribution infrastructure. All management actions would be implemented using existing KFA facilities and infrastructure, including headgates, weirs, canal systems, recharge basins, and groundwater wells. For additional description, refer to Chapter 2, Project Description.

9. Surrounding Land Uses and Setting. (Briefly describe the project’s surroundings.)

The proposed Project area includes the service areas of Kern Delta, Rosedale, Henry Miller, and Buena Vista as described in Chapter 1 and Chapter 2.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)

- Kern County Water Agency – for delivery of State Water Project water outside of KFA member district service area boundaries.

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- | | | |
|---|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology/Soils/Seismicity | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation/Traffic | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Wildfire | |
| <input type="checkbox"/> Mandatory Findings of Significance | | |

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial study:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

D. B. W.
Signature

10/28/2019
Date

Signature

Date

Environmental Checklist

3.1 Aesthetics

| <i>Issues (and Supporting Information Sources):</i> | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i> |
|---|---------------------------------------|---|-------------------------------------|-------------------------------------|
| 1. AESTHETICS — Except as provided in Public Resources Code Section 21099, would the project: | | | | |
| a) Have a substantial adverse effect on a scenic vista? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

- a) **No Impact.** Scenic vistas are defined as expansive views of distant landforms and aesthetic features from public vantage points, including areas designated as official scenic vistas along roadway corridors or otherwise designated by local jurisdictions. In and around the project area are scenic views of the Tehachapi, Sierra Nevada, San Emigdio, and Sierra Madre mountains and Kern River (Kern County Planning Department, 2004).

The proposed Project would not require or involve the construction of any new physical facilities or new water distribution infrastructure. The proposed Project includes management actions that would allow for integrated operation of existing Rosedale, Kern Delta, Henry Miller, and Buena Vista facilities, which include headgates, weirs, canal systems, groundwater recharge basins, and groundwater extraction wells. The proposed Project would not alter any scenic vistas as visible from public vantage points or roadway corridors. There would be no impact.

- b) **No Impact.** A scenic highway is officially designated as a State Scenic Highway when a local jurisdiction adopts a scenic corridor protection program, applies to the California Department of Transportation (Caltrans) for scenic highway approval, and receives notification from Caltrans that the highway has been designated as an official Scenic Highway. There are no officially-designated State Scenic Highways in Kern County, as designated by Caltrans under the California Scenic Highway Program (Caltrans, 2016). The project area is located approximately 55 miles west of State Route 14, which is an eligible State Scenic Highway but is not officially designated at this time by Caltrans. Accordingly, there are no associated scenic highway corridors in the project area, which

- are defined as the land generally adjacent to and visible by motorists from a scenic highway. No scenic resources within a scenic highway corridor, such as rock outcroppings or historic buildings, would be affected by the proposed Project. There would be no impact.
- c) **No Impact.** Visual character of a project site and its immediate surroundings is defined by existing land uses and the associated natural or built environment, including vegetation, landforms, and structural features. The proposed Project facilities would be located within existing operating facility boundaries and no new physical facilities would be built. Thus, the proposed Project would not alter the existing visual character or quality of any sites within Kern Delta, Rosedale, Henry Miller, or Buena Vista, nor would the proposed Project conflict with applicable zoning and other regulations governing the scenic quality of the project area. There would be no impact.
- d) **No Impact.** The proposed Project would not require or involve the construction of any new physical facilities or new water distribution infrastructure. No lighting would be required for construction or operational activities. There would be no new sources of light to affect daytime or nighttime views. The proposed Project would utilize existing member districts' facilities, including canals and recharge facilities. No new water features would be built that would be considered to have reflective surfaces. There would be no new sources of glare to affect daytime or nighttime views. There would be no impact.

References

- California Department of Transportation (CalTrans), 2016. California Scenic Highway Mapping System, Kern County. Available at: www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/, accessed February 28, 2017.
- Kern County Planning Department, 2004. Revised Update of the Kern County General Plan Volume 1: Recirculated Draft Program Environmental Impact Report, January 2004.

3.2 Agricultural and Forest Resources

| <i>Issues (and Supporting Information Sources):</i> | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i> |
|---|---------------------------------------|---|-------------------------------------|-------------------------------------|
| 2. AGRICULTURAL AND FOREST RESOURCES — | | | | |
| <p>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.</p> <p>Would the project:</p> | | | | |
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

a) **No Impact.** According to the California Department of Conservation (CDC), Prime Farmland is land which has the best combination of physical and chemical features able to sustain long-term agricultural production. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Prime Farmland must have been used for irrigated agricultural production at some time during the four years prior to the mapping date. Farmland of Statewide Importance is similar to Prime Farmland but with minor shortcomings such as greater slopes or less ability to store soil moisture (DOC, 2016a). Unique Farmland consists of lesser quality soils used for the production of the state’s leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards (DOC, 2016b). There is Prime Farmland, Farmland of Statewide Importance, and Unique Farmland within the boundaries of the project area (DOC, 2016c).

The proposed Project would not require or involve the construction of any new physical facilities or new water distribution infrastructure. The proposed Project includes management actions that would allow for integrated operation of existing KFA facilities to maximize existing capacity for groundwater replenishment. The proposed Project

- would support the continued viability of agricultural lands within the project area by increasing the amount of imported water or Kern River water that is recharged to the local Kern County Subbasin, which is a primary source of groundwater for agricultural irrigation. Alternately, the proposed Project may allow for the KFA agencies to maximize the use of surface water supplies by increasing potential direct deliveries to agricultural customers in-lieu of groundwater pumping. The proposed Project would contribute greater operational flexibility in the management of water resources by the KFA agencies to meet underserved demand for irrigation and/or correct the current overdraft conditions in the Subbasin. The proposed Project would not result in the direct conversion of any important farmland as designated by the California Department of Conservation's (DOC) Farmland Mapping and Monitoring Program (FMMP) to non-agricultural use. Integrated operation of existing KFA facilities proposed by the Project may reduce the need to build new facilities in the future that could occupy prime agricultural farmland. No impacts would occur.
- b) **No Impact.** In Kern County, the California Land Conservation Act (Williamson Act) is implemented locally through the County's Agricultural Preserve Program. The County has established Agricultural Preserves in accordance with the Williamson Act through land use contracts and agreements. Within the project area, there are lands that are categorized as Prime Agricultural Lands that are under contract as part of the Agricultural Preserve Program (DOC, 2014). Agricultural Preserve numbers 2, 3, 5, 6, 8, 9, 10, 11, 12, and 13 are within the boundaries of project area (County of Kern, 2017). Agricultural uses and compatible uses for these lands are defined by the County's Agricultural Preserve Standard Uniform Rules (County of Kern, 2009). As discussed above, the proposed Project would support the continued viability of agricultural lands within the project area. The proposed Project would not conflict with any agricultural zoning or Williamson Act/Agricultural Preserve contract.
- c/d) **No Impact.** There are no lands within the project area that are zoned as forest land, timberland, or timberland zoned for timberland production. Land uses within the project area are predominantly agricultural, with remaining lands used for residential, commercial, industrial, recreational, public facilities, dairies and fish farms, and undeveloped/vacant land. The proposed Project would not require or involve the construction of any new physical facilities or new water distribution infrastructure. The location and footprint of existing KFA facilities would remain unchanged. Therefore, the proposed Project would not result in the rezoning of forest land, timberland, or timberland zoned for timberland production. There would be no loss of forest land or conversion of forest land to non-forest use. There would be no impact.
- e) **No Impact.** The proposed Project does not involve any other changes to the existing environment that would result in the loss or conversion of farmland or forest land. There would be no impact.

References

- California Department of Conservation (DOC), 2014. Kern County Williamson Act FY 2013/2014, Sheet 2 of 3. Available at:
ftp://ftp.consrv.ca.gov/pub/dlrp/wa/Kern_c_13_14_WA.pdf, accessed March 21, 2017.
- DOC, 2016a. Prime Farmland as Mapped by FMMP. Available at:
http://www.conservation.ca.gov/dlrp/fmmp/overview/Pages/prime_farmland_fmmp.aspx, accessed March 20, 2017.
- DOC, 2016b. Important Farmland Categories. Available at:
http://www.conservation.ca.gov/dlrp/fmmp/mccu/Pages/map_categories.aspx, accessed March 30, 2017.
- DOC, 2016c. California Important Farmland Finder. Available at:
<http://maps.conservation.ca.gov/ciff/ciff.html>, accessed March 20, 2017.
- County of Kern, 2009. *Agricultural Preserve Program*. July 2009.
- County of Kern, 2017. Desert Renewable Energy Conservation Plan Gateway, Main DRECP Site, Kern County Agricultural Preserves, California. Available at:
<https://drecp.databasin.org/datasets/9c84704f1e564efe87ba22849e94eb3f>, accessed May 22, 2017.
-

3.3 Air Quality

| <i>Issues (and Supporting Information Sources):</i> | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i> |
|---|---------------------------------------|---|-------------------------------------|-------------------------------------|
| 3. AIR QUALITY — | | | | |
| Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. | | | | |
| Would the project: | | | | |
| a) Conflict with or obstruct implementation of the applicable air quality plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Expose sensitive receptors to substantial pollutant concentrations? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

- a) **No Impact.** The proposed Project is located in the San Joaquin Valley Air Basin, which is within the jurisdictional boundary of the San Joaquin Valley Air Pollution Control District (SJVAPCD). The proposed Project would not require or involve the construction of any new physical facilities or new water distribution infrastructure. Rather, the proposed Project includes management actions that would change the operation of existing KFA members’ facilities. Operation of some KFA facilities requires energy to power pumps, and motors. Energy is generated at offsite power plants, the operation of which results in air emissions, including GHG emissions. Although the proposed integration may result in more frequent operation of existing facilities in order to maximize the use of imported water and local surface water; such operations would be within permitted capacities and within the maximum operating constraints already evaluated in accordance with CEQA for each individual facility. As such, the proposed integration would not result in new air quality and GHG emissions, in addition to those already permitted and evaluated in accordance with CEQA. Therefore, the proposed Project would not conflict with the SJVAPCD air quality plans by violating or contribute to existing violations of air quality standards in the Basin. There would be no impact.

- b) **No Impact.** A cumulative impact arises when two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. Cumulative impacts can result from individually minor but collectively significant impacts, meaning that the proposed Project’s incremental effects must be viewed in connection with the effects of past, current, and probable future projects. The entire San Joaquin Valley Air Basin is designated as nonattainment for both the state and federal standards for suspended particulate matter (PM₁₀) and fine particulate matter (PM_{2.5}) but is designated as attainment for federal standards for ozone (O₃) and nonattainment for state standards for O₃ (CARB, 2015). Because the San Joaquin Valley Air Basin is currently classified as a state nonattainment area for ozone,

PM₁₀, and PM_{2.5}, cumulative development consisting of the proposed Project along with other past, present, and reasonably foreseeable future projects in the San Joaquin Valley Air Basin as a whole could violate an air quality standard or contribute to an existing or projected air quality violation. However, based on SJVAPCD's cumulative air quality impact methodology, SJVAPCD recommends that if an individual project results in air emissions of non-attainment criteria pollutants that exceed the SJVAPCD's recommended daily thresholds for project-specific impacts, then it would also result in a cumulatively considerable net increase of these criteria pollutants for which the proposed Project region is in non-attainment under an applicable federal or state ambient air quality standard.

As previously described, the proposed Project would not require or involve the construction of any new physical facilities or new water distribution infrastructure. The proposed Project would affect the operation of existing headgates, weirs, pumps, canals, recharge basins and wells. Such facilities are not direct emitters of air pollutants. As a result, the proposed Project would not result in any direct new emissions of criteria pollutants within the Basin, would not exceed the SJVAPCD's daily threshold for any non-attainment criteria pollutants or pollutant precursors, and would not contribute to a considerable net increase in area emissions. Therefore, the project would result in no cumulative impacts.

- c/d) **No Impact.** The proposed Project would not require or involve the construction of any new physical facilities or new water distribution infrastructure. Thus, there would be no associated construction-related activities/equipment that would emit diesel exhaust, produce dust, or result in any other adverse air quality or odor effects that would impact sensitive receptors. The proposed operational changes to existing facilities also would not result in emission of any air pollutants or other emissions that would impact sensitive receptors. The proposed Project would not expose sensitive receptors to substantial criteria air pollutants or objectionable odors. There would be no impact.

References

California Air Resources Board (CARB), 2015. State Area Designations maps and National Area Designations maps, Available online at: <https://www.arb.ca.gov/desig/adm/adm.htm>, Prepared December 2015.

3.4 Biological Resources

| <i>Issues (and Supporting Information Sources):</i> | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i> |
|--|---------------------------------------|---|-------------------------------------|-------------------------------------|
| 4. BIOLOGICAL RESOURCES — Would the project: | | | | |
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

- a-e) **Less than Significant.** The project area includes the service areas of Kern Delta, Rosedale, Henry Miller, and Buena Vista, which includes primarily agricultural lands south, southwest and northwest of the City of Bakersfield. The project area also includes residential, commercial, and industrial uses.

Riparian habitat is present within the project area along the Kern River. The Kern River itself has been almost entirely diverted for irrigation and recharging aquifers. The proposed Project would not change the total amount of water diverted from the river during normal or dry hydrologic conditions. The proposed integration would primarily have an effect during wet hydrologic periods when high-flow Kern River water and excess SWP and CVP water are available. During dry and normal hydrologic periods, KFA agencies individually are able to maximize the use of facilities and available water supplies. During wet hydrologic periods, the proposed integration may result in changes to the relative amount of water diverted by the KFA agencies at existing diversion points on the Kern River. KFA agencies would transfer or divert water amongst each of their facilities to provide the most wet year yield for the project area. During wet hydrologic periods, changing the relative amount of water diverted at points along the Kern River

would not have an impact on riparian habitat or associated wetlands or species; during such conditions, river flow is not a constraint on the viability of riparian habitat. The Kern River may serve as a wildlife corridor for some migratory species; during wet hydrologic periods the proposed integration would not affect availability of open channel or riparian habitat that migratory fish or wildlife species may rely on. Impacts to biological resources in the Kern River would be less than significant.

The proposed Project also would have no impact on terrestrial biological resources. The proposed Project would not construct new facilities or alter the footprint of existing facilities. The proposed Project would result in more water flowing through KFA facilities within the bounds of their existing capacity. There would be no land disturbance; no affect to terrestrial habitats or vegetation communities; and no effect on terrestrial wildlife species.

- f) **No Impact.** The proposed Project is located in the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP) area. The MBHCP addresses the effect of urban growth on federally and State protected plant and animal species within the Metropolitan Bakersfield General Plan area, which includes both incorporated City and unincorporated County lands. The MBHCP is designed to bring certainty to the process of complying with endangered species laws while allowing for future economic growth of the Metropolitan Bakersfield area. The program also satisfies the conservation goals of State and federal endangered species laws. The MBHCP utilizes a mitigation fee paid by applicants for grading or building permits to fund the purchase and maintenance of habitat land to compensate for the effects of urban development on endangered species habitat. Kern County and the City of Bakersfield have entered into a legal agreement with the California Department of Fish and Game and the U.S. Fish and Wildlife Service that spells out obligations in conjunction with the MBHCP. The agreement allows the County and the City to receive habitat mitigation credit that can be applied against future habitat loss that accompanies urban development. The proposed Project would not result in the construction of any new physical facilities and thus would not result in any land disturbance requiring grading or building permits. The proposed Project would not conflict with the MBHCP. There would be no impact.

References

City of Bakersfield, 1994. Metropolitan Bakersfield Habitat Conservation Plan, April 1994.

3.5 Cultural Resources

| <i>Issues (and Supporting Information Sources):</i> | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i> |
|---|---------------------------------------|---|-------------------------------------|-------------------------------------|
| 5. CULTURAL RESOURCES — Would the project: | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Disturb any human remains, including those interred outside of formal cemeteries? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

- a) **No Impact.** According to CEQA Guidelines Section 15064.5a, a historic resource is any object, building, structure, site, area, place, record, or manuscript that is listed or determined to be eligible for listing by the State Historical Resources Commission, a local register of historic resources, or the lead agency. A substantial adverse change to a historic resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings. The proposed Project would not require or involve the construction of any new physical facilities or new water distribution infrastructure. The location and footprint of existing facilities would remain unchanged. No adverse changes to historical resources would occur as a result of the proposed Project. There would be no impact.
- b) **No Impact.** According to CEQA Guidelines Section 15064.5c and Public Resources Code 21083.2, a unique archaeological resource is an object, artifact, or site that meets any of the following criteria: (1) contains information needed to answer important scientific research questions, (2) has a special and particular quality such as being the oldest of its type or the best available example of its type, or (3) is directly associated with a scientifically recognized important prehistoric or historic event or person. The proposed Project would not require or involve the construction of any new physical facilities or new water distribution infrastructure. The location and footprint of existing facilities would remain unchanged. There would be no new ground disturbance associated with the proposed Project relative to existing conditions. As such, the proposed Project would not cause a substantial adverse change in the significance of an archaeological resource. There would be no impact.
- c) **No Impact.** The proposed Project would not require or involve the construction of any new physical facilities or new water distribution infrastructure. The location and footprint of existing facilities would remain unchanged. There would be no new ground disturbance associated with the proposed Project relative to existing conditions. As such, the proposed Project would have no potential to uncover or disturb human remains, either within or outside of a formal cemetery. There would be no impact.

3.6 Energy

| <i>Issues (and Supporting Information Sources):</i> | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporation</i> | <i>Less-Than-Significant Impact</i> | <i>No Impact</i> |
|---|---------------------------------------|--|-------------------------------------|-------------------------------------|
| 6. ENERGY — Would the project: | | | | |
| a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

a, b) **No Impact.** The proposed Project would not construct any new physical facilities or water distribution infrastructure. Energy requirements associated with maximum operational capacity of each facility to be included in the proposed integration would not change. As such, no new sources of energy would need to be constructed. Integrated operation of existing KFA facilities would achieve energy efficiencies by optimizing water conveyance, recharge, and reducing deep well pumping. Thus, no wasteful or unnecessary consumption of energy would occur, and the proposed Project would not conflict with or obstruct applicable plans for renewable energy or energy efficiency. There would be no impact.

3.7 Geology, Soils, and Seismicity

| <i>Issues (and Supporting Information Sources):</i> | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i> |
|--|---------------------------------------|---|-------------------------------------|-------------------------------------|
| 7. GEOLOGY and Soils — Would the project: | | | | |
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ii) Strong seismic ground shaking? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| iii) Seismic-related ground failure, including liquefaction? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| iv) Landslides? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Result in substantial soil erosion or the loss of topsoil? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

- a.i) **No Impact.** The Alquist-Priolo Earthquake Fault Zoning Act, signed into law in December of 1972, requires the delineation of zones along active faults in California. The purpose of the Alquist-Priolo Act is to regulate development and prohibit construction on or near active fault traces to reduce hazards associated with fault rupture. The Alquist-Priolo Earthquake Fault Zones are the regulatory zones delineated on maps that include surface traces of active faults. The maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling new or renewed construction. Local agencies must regulate most development projects within the zones, which include all land divisions and most structures for human occupancy. According to the Department of Conservation Information Warehouse, as mapped by the California Geological Survey (CGS) through 2015, there are no Alquist-Priolo Earthquake Fault Zones within the boundaries of project area (CGS, 2015). In addition, the proposed Project would not involve any new or renewed construction. Therefore the proposed Project would have no

adverse effects to people or structures within an Alquist-Priolo Earthquake Fault Zone. There would be no impact.

- a.ii) **No Impact.** In general, Southern California is a seismically active area, with most locations in proximity to faults that can produce detectable seismic ground shaking. Kern County is located in one of the more seismically active areas of California and may, at any time, be subject to moderate-to-severe ground shaking (Kern County, 2009). The proposed Project would not require or involve the construction of any new physical facilities or new water distribution infrastructure. Therefore, relative to existing conditions, the proposed Project would not expose people or structures to new potential substantial adverse effects related to strong seismic ground shaking. There would be no impact.
- a.iii) **Less than Significant.** Liquefaction is the phenomenon in which saturated granular sediments temporarily lose their shear strength during periods of earthquake-induced strong groundshaking. Liquefaction can produce excessive settlement, ground rupture, lateral spreading, or failure of shallow water bearing foundations. In accordance with Special Publication 117A (SP 117A), published by the California Department of Conservation, California Geological Survey (CGS, 2008), standard geotechnical engineering analyses in California are not required to assess liquefaction where the depth to groundwater is greater than 50 feet. Depth to groundwater throughout the project area is variable; in some places there may be shallow groundwater and the potential for liquefaction to occur caused by seismic shaking and rising groundwater levels. Previous CEQA documentation undertaken by the KFA member districts for the facilities to be used for the proposed Project addressed liquefaction potential assuming full operation of each individual facility. The proposed Project would not change the groundwater recharge limits for each recharge facility, and would therefore not increase liquefaction potential above what has been previously analyzed. Additionally, the proposed Project would not involve the construction of any new physical facilities or new water distribution infrastructure or expand the footprint of existing KFA systems. Therefore, relative to existing conditions, the proposed Project would not expose people or structures to new potential substantial adverse effects related to liquefaction. Impacts would be less than significant.
- a.iv) **No Impact.** The service areas of KFA members are located in an area that does not have steep slopes. Due to the flat topography, the potential for landslide occurrence is low. In addition, the proposed Project would not require or involve the construction of any new physical facilities or new water distribution infrastructure. The proposed Project would not result in disturbance of any new parcels or expansion of the footprint of the KFA's systems. The proposed Project would be implemented with existing facilities, which would be operated within existing capacity constraints. Therefore, relative to existing conditions, the proposed Project would not expose people or structures to new potential substantial adverse effects related to landslides. There would be no impact.

- b) **No Impact.** The proposed Project would not require or involve the construction of any new physical facilities or new water distribution infrastructure. The proposed Project would not result in disturbance of any new parcels or expansion of the footprint of the KFA's systems. The proposed Project would be implemented with existing facilities, which would be operated within existing capacity constraints. As a result, there would be no new ground disturbance that would result in soil erosion or the loss of topsoil. There would be no impact.
- c) **No Impact.** The proposed Project would not require or involve the construction of any new physical facilities or new water distribution infrastructure. The proposed Project would not result in disturbance of any new parcels or expansion of the footprint of the KFA's systems. The proposed Project would be implemented with existing facilities, which would be operated within existing capacity constraints. The proposed Project does not have the potential to locate any new facilities on a geologic unit or soils that are unstable. Therefore, relative to existing conditions, the proposed Project would not cause soils to become unstable or result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse. There would be no impact.
- d) **No Impact.** Expansive soils contain a significant amount of clay particles that have the ability to take on water (swell) and release water (shrink). The moisture content of soils can fluctuate seasonally with precipitation, but can also vary from irrigation, leakage from waterbearing structures, and changes in site drainage. The shrink-swell behavior of expansive soils can place significant pressure and stress on buildings and foundations. Structural damage can result if a building is built on expansive soils without proper mitigation through site preparation or foundation design. The proposed Project does not involve construction of new facilities or water distribution infrastructure and therefore would not result in locating structures on expansive soils which would create substantial risks to life or property. There would be no impact.
- e) **No Impact.** The proposed Project does not involve the use of septic tanks or other wastewater disposal systems. There would be no impact.
- f) **No Impact.** Paleontological resources are fossils, the remains of prehistoric plants and animals, that are important scientific and educational resources because of their use in: (1) documenting the presence and evolutionary history of particular groups of both extinct and extant organisms, (2) reconstructing the environments in which these organisms lived, and (3) in determining the relative ages of the strata in which they occur and the geologic events that resulted in the deposition of the sediments that formed these strata. The proposed Project would not require or involve the construction of any new physical facilities or new water distribution infrastructure. The location and footprint of existing facilities would remain unchanged. There would be no new ground disturbance associated with the proposed Project relative to existing conditions. As such, the proposed Project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. There would be no impact.

References

California Geologic Survey, 2008. *Special Publication 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California*. 2008.

California Geologic Survey, 2015. CGS Information Warehouse, Regulatory Maps. Available at: <http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps>, accessed March 21, 2017.

County of Kern, 2009. *General Plan Safety Element, Chapter 4*. September 2009.

3.8 Greenhouse Gas Emissions

| <i>Issues (and Supporting Information Sources):</i> | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i> |
|---|---------------------------------------|---|-------------------------------------|-------------------------------------|
| 8. GREENHOUSE GAS EMISSIONS — Would the project: | | | | |
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

- a) **Less than Significant.** Greenhouse gases (GHGs) trap heat radiated from the sun as it is reflected back into the atmosphere and are generated by natural processes as well as from human activities. The accumulation of GHGs has been implicated as a driving force in global climate change. The principal GHGs are carbon dioxide (CO₂), methane (CH₄), nitrogen oxides (NO_x), ozone, water vapor and fluorinated gases. Fossil fuel consumption in the transportation sector (on-road motor vehicles, off-highway mobile sources, and aircraft) is the single largest source of GHG emissions, accounting for approximately one-half of GHG emissions globally. The proposed Project does not require construction activities associated with heavy equipment operation, truck deliveries or construction commute trips that would temporarily generate GHGs. The proposed Project includes management actions that would change the operation of existing KFA facilities. The proposed Project would affect the operation of existing headgates, weirs, pumps, canals, recharge basins and groundwater extraction wells. Such facilities are not direct emitters of GHGs.

However, operation of some KFA facilities requires energy to power pumps and motors. Energy is generated at offsite power plants, the operation of which results in air emissions, including GHG emissions. Although the proposed integration may result in more frequent operation of existing facilities in order to maximize the use of imported water and local surface water; such operations would be within permitted capacities and within the maximum operating constraints already evaluated in accordance with CEQA for each individual facility. As such, the proposed integration would not result in new GHG emissions, in addition to those already permitted and evaluated in accordance with CEQA. Therefore, impacts associated with emissions of GHG associated with operational energy use would be less than significant.

- b) **No Impact.** California has passed several bills and the governor has signed at least three executive orders regarding GHGs. Assembly Bill (AB) 32 (the Global Warming Solutions Act) was passed by the California legislature on August 31, 2006. It requires the state's global warming emissions to be reduced to 1990 levels by 2020. The reduction will be accomplished through preparation of a Scoping Plan to layout the strategies and be updated every five years (CARB, 2014). The County approved the *Kern County Communitywide Greenhouse Gas*

Emission Inventory Final Report in May 2012. The County GHG inventory accounts for baseline emissions in 2005 and forecasts future emissions in 2020. The 2020 forecasted GHG emissions inventory was estimated to be 27 million metric tons of CO₂e within the County, of which electricity consumption represents 31% (Kern County, 2012).

In addition, the County is within the jurisdictional boundary of the SJVAPCD and may potentially be subject to their applicable climate change policies. SJVAPCD released the *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA* to streamline the process of determining if project specific GHG emissions would have a significant effect (SJVAPCD, 2009a). The methodology being proposed relies on the use of performance based standards that would be applicable to projects that result in increased GHG emissions. Projects implementing best performance standards (BPS) or achieving at least a 29% GHG emission reduction compared to business as usual (BAU) would be determined to have a less than significant individual and cumulative impact for GHG. Establishing BPS per project is determined per project using the *District Policy – Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency* (SJVAPCD, 2009b).

The proposed Project involves management actions that would allow for integrated operation of existing facilities and does not require construction or operation of new facilities. As explained above, the proposed integration may result in more frequent operation of existing facilities in order to maximize the use of imported water and local surface water; however, such operations would be within permitted capacities and within the maximum operating constraints already evaluated in accordance with CEQA for each individual facility. As a result, the proposed Project would not be subject to SJVAPCD's policy for addressing GHGs emissions because no new unpermitted emissions would result from its operation. As a result, there would be no increase in GHGs that would require the implementation of BPS. The proposed Project would not contribute to any new emissions of GHGs and would not conflict with any of the SJVAPCD air quality plans, rules, or regulations associated with reducing GHGs. There would be no impact.

References

- California Air Resources Board (CARB), 2014. Assembly Bill 32 Overview, Available online at: <https://www.arb.ca.gov/cc/ab32/ab32.htm>, Last updated on August 5, 2014.
- Kern County, 2012. Communitywide Greenhouse Gas Emissions Inventory 2005 Baseline Year – 2020 Forecast, Final Report. Available online at: https://www.kerncog.org/images/docs/transmodel/kc_ghg_final_report_052012.pdf. Prepared May 2012.
- San Joaquin Valley Air Pollution Control District (SJVAPCD), 2009a. Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA, December 17, 2009.
- SJVAPCD, 2009b. The District Policy – Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency, December 17, 2009.

3.9 Hazards and Hazardous Materials

| <i>Issues (and Supporting Information Sources):</i> | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i> |
|---|---------------------------------------|---|-------------------------------------|-------------------------------------|
| 9. HAZARDS AND HAZARDOUS MATERIALS — Would the project: | | | | |
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

- a-c) **No Impact.** The California Office of Emergency Services oversees state agencies and programs that regulate hazardous materials (Health and Safety Code, Article 1, Chapter 6.95). A hazardous material is any material that because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or environment. The proposed Project provides the ability for Rosedale, Kern Delta, Henry Miller District, and Buena Vista to exchange, transfer, recharge, recover, and operate individual water banking activities as a single comprehensive program. As previously described, the proposed Project utilizes existing infrastructure and would not require routine transport, use, or disposal of new hazardous materials. Therefore, the proposed Project would not result in a hazard to the public or environment due to accidental release of hazardous materials into the environment. The proposed Project would not emit hazardous emissions or introduce hazardous materials, substances, or waste within one-quarter mile of a school. There would be no impact.

- d) **No Impact.** Government Code Section 65962.5 requires the California Environmental Protection Agency (Cal EPA) to develop and annually update the Hazardous Waste and Substances Sites (Cortese) List. The Cortese List is a planning document used by state and local agencies to comply with CEQA requirements in providing information about the location of hazardous materials release sites. The information contained in the Cortese List is provided by Cal EPA's Department of Toxic Substance Control (DTSC) and other state and local government agencies. Although there are sites within the boundaries of the project area that are on the Cortese List, the proposed Project would not result in the construction or expansion of facilities that would change the footprint of KFA facilities. The proposed Project would utilize only existing KFA facilities. The proposed integration would maximize opportunities to replenish the underlying Kern County Subbasin; the KFA facilities would be operated within existing, permitted operating capacities and constraints. The associated groundwater recharge would not result in greater mobilization of groundwater contaminants in addition to that which has already been identified and evaluated in accordance with CEQA for individual facilities. No new parcels would be affected that could be located on a hazardous materials site on the Cortese List. There would be no change relative to existing conditions with respect to hazardous waste and substances site. There would be no impact.
- e) **No Impact.** The project area encompasses the service areas of Kern Delta, Rosedale, Henry Miller District, and Buena Vista. Within Kern Delta service area, the nearest public airport, the Bakersfield Municipal Airport, is located approximately 3.5 miles south of the downtown area of Bakersfield at 2000 S. Union Ave. The airport, which is owned by the City of Bakersfield, is approximately 200 acres in size and is just north of the KDWD service area boundary. The nearest public airport to Henry Miller District is Taft-Kern County Airport. It is located at 468 Airport Road, in Taft approximately 7.26 miles west of the Henry Miller District service area. There are no public airports within Buena Vista service area or Rosedale service area. There are several private airstrips within the project area. Joe Gottlieb Field Airport is located at 17453 Brimhall Road, approximately 3.14 miles west of the Rosedale facilities while Paradise Lakes Airstrip is located near the intersection of Millux Road and North Wheeler Ridge Road. J&J Crop Dusters Inc Airstrip is located near the intersection of Millus Road and Malaga Road. Costerisan Farms Airstrip is located near the intersection of Taft Highway and Stine Road. The Lost Hills-Kern County is located near the intersection of State Route 46 and Lost Hills Road, just outside of the project area, approximately 2.50 miles northwest of the Buena Vista service area.

The proposed Project includes management actions that would integrate existing operation of KFA members' facilities. The proposed Project would not result in the construction or expansion of facilities that would change the footprint of KFA facilities. The proposed management actions would not introduce any operational changes that would result in a safety hazard or excessive noise for the people residing or working in the vicinity of public airports or private airstrips. There would be no impact.

- f) **No Impact.** The proposed Project would not require or involve the construction of any new physical facilities or new water distribution infrastructure. The proposed Project would be implemented with existing facilities, which would be operated within existing capacity constraints. The proposed Project would not result in new structures or operating conditions that would impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. There would be no impact.
- g) **No Impact.** The project area is comprised primarily of agricultural land uses in unincorporated Kern County and includes urbanized lands within the City of Bakersfield and its sphere of influence. The project area does not include any wildlands or residential areas that are adjacent to or intermixed with wildlands. In addition, the proposed Project would not require any construction activities or other operational activities that would introduce a new risk associated with wildland fires. There would be no impact.
-

3.10 Hydrology and Water Quality

| <i>Issues (and Supporting Information Sources):</i> | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i> |
|--|---------------------------------------|---|-------------------------------------|-------------------------------------|
| 10. HYDROLOGY AND WATER QUALITY — | | | | |
| Would the project: | | | | |
| a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: | | | | |
| i) result in substantial erosion or siltation on- or off-site; | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| iii) create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| iv) impede or redirect flood flows? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

- a) **No Impact.** The proposed Project would involve replenishment of available surface water supplies in existing KFA member district facilities. The sources of water would not change from what is currently recharged in KFA member district service areas based on previously approved CEQA documents and permitted projects. Mitigation measures, if any, adopted as part of those projects would continue to apply for each KFA member district to ensure that water quality standards are upheld. In areas where existing facilities serve to provide benefits to groundwater quality due to recharge of surface waters with lower constituent concentrations and load, the proposed Project will continue to support improvements to groundwater equality. As a result, no impact would occur.

- b/e) **Less than Significant Impact.** The Central Valley RWQCB Water Quality Control Plan (Basin Plan) sets water quality objectives that are qualitative and quantitative in order to protect the beneficial uses within the basin. The proposed Project would integrate the facilities of KFA member districts and allow KFA the operational flexibility to maximize the use of available surface water supplies, primarily during wet hydrologic periods,

either through groundwater recharge or direct delivery in lieu of groundwater pumping. Individual facilities constructed by KFA member districts have previously been evaluated for impacts to groundwater quality, groundwater levels, and replenishment amounts, and mitigation measures, if any, adopted as part of those projects would continue to apply for each KFA member district project facility to ensure that maximum replenishment capacities do not change, that groundwater levels do not decline, and that Basin Plan objectives are met. Collectively, integration may result in greater replenishment of approved and available water sources. During wet hydrologic periods, surface water supplies such as high-flow Kern River water and surplus CVP and SWP water, which were previously available but unused due to capacity constraints of each individual KFA member district, may now be diverted and used within the previously-approved facilities of other member districts. This may result in a net increase of groundwater levels within the Kern County Subbasin relative to existing opportunities. This increase in wet year storage or deliveries would additionally benefit the KFA agencies' agricultural customers through use of water for irrigation.

To the extent that Project operation results in less water being available for downstream users, this would occur during wet hydrologic periods when Kern River flow is above normal, and thus the proposed Project would not be expected to harm downstream users. By allowing for efficiencies within the Subbasin, the proposed Project would provide a net benefit to groundwater levels and would promote sustainability, in particular in light of potential groundwater pumping restrictions forthcoming due to the Sustainable Groundwater Management Act (SGMA). As a result, the proposed Project would not substantially decrease groundwater supplies or interfere with recharge in a way that would impede sustainable groundwater management of the basin. As a result, there would be no conflict with implementation of a water quality control plan or groundwater management plan, and impacts would be less than significant.

- c i-iv) **No Impact.** The proposed Project would include use of existing conveyance facilities (canals, weirs) and recharge basins. None of the previously-approved capacities for existing facilities would be exceeded, and no new facilities would need to be constructed. As such, no new impervious surfaces would be created as a result of the proposed Project, and there would be no potential for increases in surface runoff that could result in flooding, erosion, exceedance of drainage capacities, or polluted runoff.

During wet hydrologic periods, the proposed integration may result in changes to the relative amount of water diverted by the KFA agencies at existing diversion points on the Kern River. KFA agencies could transfer or divert excess surface water supplies such as high-flow Kern River water or surplus CVP or SWP water amongst each of their facilities to provide the most wet year yield for the project area. As a result, the proposed Project would not result in an increased flow in the Kern River. The natural course of the Kern River would remain the same with implementation of the proposed Project.

The Flood Insurance Rate Maps (FIRMs) produced by the Federal Emergency Management Agency (FEMA) indicate areas prone to flood hazards due to major storm

events, including 100-year and 500-year flood zones. FIRM maps identify flood zones in the KFA member' service areas along and surrounding the Kern River (FEMA, 2008). The proposed Project would utilize existing weirs on the Kern River to divert water in accordance with capacity constraints of existing facilities. The proposed Project, however, would not construct new facilities or expand existing KFA facilities. Because no permanent facilities would be constructed as a result of proposed integration, the project would not involve infrastructure or activities that could impede or redirect flows. In addition, integrated surface water diversions and transfers among the KFA agencies would result in a net benefit during high flow events in the Kern River, as flood control capacity Kern River would be enhanced relative to existing conditions. As a result, there would be no impacts.

- d) **No Impact.** Portions of the proposed Project area are in a 100-year flood zone. As discussed above for Item 10c, the proposed Project would not change the existing risk of flooding or flood hazards. As such, impacts due to potential release of pollutants in a flood hazard area would not occur.

A seiche is a wave set up on a river, reservoir, pond, or lake when seismic waves from an earthquake pass through the area (USGS, 2019a). Since the proposed Project would not introduce new facilities into the project area, there would be no potential impacts associated with the risk of release of pollutants due to project inundation from a seiche.

A tsunami is a sea wave of local or distant origin that results from large-scale seafloor displacements associated with earthquakes, major submarine slides or exploding volcanic islands (USGS, 2019b). An event such as an earthquake creates a large displacement of water resulting in a rise or mounding at the ocean surface that moves away from this center as a sea wave. The proposed Project site is over 100 miles east of the Pacific Ocean, and therefore is not located within the tsunami risk zone. Therefore, the proposed Project area would not be subject to tsunamis and would not risk release of pollutants due to project inundation from a tsunami. No impacts would occur.

References

FEMA, 2008. FEMA Flood Map Service Center, Search by Address. Available at: <https://msc.fema.gov/portal>, accessed March 21, 2017.

USGS, 2019a. Seismic Seiches. Available at: <https://earthquake.usgs.gov/learn/topics/seiche.php>, accessed March 2019.

USGS, 2019b. Earthquake Glossary, Tsunami. Available at: <https://earthquake.usgs.gov/learn/glossary/?term=tsunami>, accessed March 2019.

3.11 Land Use and Land Use Planning

| <i>Issues (and Supporting Information Sources):</i> | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i> |
|---|---------------------------------------|---|-------------------------------------|-------------------------------------|
| 11. LAND USE AND LAND USE PLANNING — Would the project: | | | | |
| a) Physically divide an established community? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

a/b) **No Impact.** The project area includes portions of the County of Kern, the City of Bakersfield and various communities such as Buttonwillow, Millux, Conner, and Fuller Acres. The land use plans, policies, and regulations of these jurisdictions apply within KFA member districts’ service areas. The proposed Project includes management actions that would allow for integrated operation of existing KFA facilities. The proposed Project would not require or involve the construction of any new physical facilities or new water distribution infrastructure. The footprint of existing facilities would not change, and no additional parcels would be affected relative to existing conditions. The proposed Project would not introduce any facilities that would physically divide an established community or conflict with land use plans, policies, or regulations of the City or County. There would be no impact.

References

City of Bakersfield, 2017. Metropolitan Bakersfield Habitat Conservation Plant. Available at: http://www.bakersfieldcity.us/gov/depts/community_development/habitat.htm, accessed March 21, 2017.

3.12 Mineral Resources

| <i>Issues (and Supporting Information Sources):</i> | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i> |
|--|---------------------------------------|---|-------------------------------------|-------------------------------------|
| 12. MINERAL RESOURCES — Would the project: | | | | |
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

a/b) **No Impact.** The project area includes portions of Kern County, the City of Bakersfield and various communities such as Buttonwillow, Millux, Conner, and Fuller Acres. Within the project area, there are County lands designated as areas that contain known or potentially productive petroleum fields, natural gas, geothermal resources, or mineral deposits of regional and statewide significance (County of Kern Planning Department, 2010). In addition, there are City lands designated as Resource – Mineral Petroleum (Land Use Map Code R-MP) within Kern Delta service area. However, the proposed Project would not require or involve the construction of any new physical facilities or new water distribution infrastructure. The proposed Project includes management actions that would allow for integrated operation of existing KFA facilities. The footprint of existing facilities would not change, and no additional parcels would be affected relative to existing conditions. Thus, the proposed Project would not introduce any new loss of availability of mineral resources that would be valuable locally, to the region, or the state. There would be no impact.

References

City of Bakersfield and County of Kern, 2011. Metropolitan Bakersfield General Plan, East (map), Updated February 24, 2011.

City of Bakersfield and County of Kern, 2013. Metropolitan Bakersfield General Plan, West (map), updated March 21, 2013.

County of Kern Planning Department, 2010. Land Use, Open Space & Conservation Element Kern County, Central section map, July 27, 2010.

3.13 Noise

| <i>Issues (and Supporting Information Sources):</i> | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i> |
|---|---------------------------------------|---|-------------------------------------|-------------------------------------|
| 13. NOISE — Would the project result in: | | | | |
| a) Generation of a substantial temporary or permanent increase in ambient noise levels the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Generation of excessive groundborne vibration or groundborne noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

- a) **No Impact.** The project area is located in Kern County and includes portions of the City of Bakersfield and various communities such as Buttonwillow, Millux, Conner, and Fuller Acres. The proposed Project would not change the noise environment within Kern Delta, Rosedale, Henry Miller, or Buena Vista service areas relative to existing conditions. There would be no temporary or periodic increase in ambient noise levels because the proposed Project does not involve any construction activities. The existing KFA facilities to be used as part of the project that generate noise include pumps and wellheads. Current operation of these facilities varies annually based on how much water is available and the associated need to move water by use of wells and pumps through the KFA member district service areas. Thus, any additional operational noise associated with existing facilities would be similarly variable and would not increase the maximum noise capacities previously approved for each facility. As a result, no permanent increase in ambient noise levels would occur because the proposed Project only includes management actions that would integrate operation of existing KFA facilities (and would not be additive). Existing facilities currently are designed and operated to be in compliance with applicable noise standards established in the general plans, municipal codes, noise ordinances, or applicable standards of other agencies. There would be no impact.
- b) **No Impact.** The proposed Project would not change the existing conditions relative to groundbourne vibration or groundbourne noise levels. The proposed Project does not include any construction activities that could temporarily generate groundbourne vibration. The proposed Project only includes management actions that would allow for integrated operation of existing KFA facilities. The existing KFA facilities to be used as part of the Project that would generate detectable groundbourne vibration include pumps and wellheads. Current operation of these facilities varies annually based on how much water is available and the associated need to move water by use of wells and pumps through the KFA member district service areas. Thus, any additional groundbourne

vibration associated with existing facilities would be similarly variable and would not increase the maximum noise capacities previously approved for each facility. As a result, no increase in groundbourne vibration levels would occur because the proposed Project only includes management actions that would integrate operation of existing KFA facilities (and would not be additive). There would be no impact.

- c) **No Impact.** As described above under Hazards and Hazardous Materials, the public airports in the project vicinity are Bakersfield Municipal Airport and Taft-Kern County Airport. Kern County has adopted an Airport Land Use Compatibility Plan (ALUCP) (County of Kern, 2012), that includes both the Bakersfield Municipal Airport and Taft-Kern County Airport. Additionally, there are several private airstrips within and around the project area, including Joe Gottlieb Field Airport, Paradise Lakes Airstrip, J&J Crop Dusters Inc, and Costerisan Farms Airstrip. As required by the Aeronautics Law, Public Utilities Code (Chapter 4, Article 3.5) regarding public airports and surrounding land use planning, proposals for public or private land use developments that occur within defined airport influence areas (AIA) are subject to compatibility review. The principle airport land use compatibility concerns addressed by the plan are (1) exposure to aircraft noise, (2) land use safety with respect to both people and property on the ground and the occupants of aircraft, (3) protection of airport air space, and (4) general concerns related to aircraft overflights.

Some existing KFA facilities, such as Kern Delta's Kern Island Canal, are located within the airport influence area of the Bakersfield Municipal Airport. However, the proposed integration would not alter existing facilities or add new facilities within an AIA. There would be no change to the existing noise environment in and around the AIAs due to the proposed Project. Therefore, the proposed Project would not expose people residing or working in the area to additional airport-related noise levels that are excessive. There would be no impact.

References

County of Kern, 2012. Airport Land Use Compatibility Plan, November 13, 2012.

3.14 Population and Housing

| <i>Issues (and Supporting Information Sources):</i> | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i> |
|---|---------------------------------------|---|-------------------------------------|-------------------------------------|
| 14. POPULATION AND HOUSING — Would the project: | | | | |
| a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

- a) **No Impact.** The proposed Project is a facilities integration project and does not include construction of new homes or businesses. The proposed Project would not generate the need for additional staff at the KFA member districts and thus would not result in an increase in local population due to employment opportunities. As a result, the proposed Project would not directly induce population growth. There would be no impact.

The proposed Project would integrate the facilities of KFA member districts to maximize the use of available surface water supplies during wet hydrologic periods either through groundwater recharge or direct delivery in lieu of groundwater pumping. This increase in wet year storage or deliveries would benefit the KFA member districts' agricultural customers and be used for irrigation. The proposed project would allow the KFA member districts to maximize the storage capacity of existing groundwater projects. The proposed Project would support future irrigation demand, in particular in light of potential groundwater pumping restrictions forthcoming due to SGMA.

While the proposed Project is intended to support water supplies for agricultural irrigation, some KFA member districts, such as Kern Delta and Rosedale, serve municipal and industrial water demand as well. As described in Section 2.4, Project Implementation, the proposed Project and would not expand the capacity of the KFA member districts' existing projects and programs. As such, the proposed Project would not support new municipal and industrial water demand and thus would not indirectly support growth by providing an additional potable/urban water supply. There would be no impact.

- b/c) **No Impact.** The proposed Project does not include construction of new homes, businesses, or water infrastructure that would displace existing housing or people. As a result, the proposed Project would not necessitate the construction of replacement housing elsewhere. There would be no impact.

3.15 Public Services

| <i>Issues (and Supporting Information Sources):</i> | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i> |
|--|---------------------------------------|---|-------------------------------------|-------------------------------------|
| 15. PUBLIC SERVICES — Would the project: | | | | |
| a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services: | | | | |
| i) Fire protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ii) Police protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| iii) Schools? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| iv) Parks? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| v) Other public facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

- a) **No Impact.** The proposed Project would not require or involve the construction of any new or expanded physical facilities or water distribution infrastructure. The proposed Project would be implemented with existing facilities, which would be operated within existing capacity constraints. As a result, relative to existing conditions, the proposed Project would not introduce new industrial facilities that would require additional emergency response services. The proposed Project would not require additional staff at the KFA member districts and would not induce population growth (see Population and Housing above). As a result, the proposed Project would not lead to the construction of new housing, which could lead to a need for additional school services or park facilities to maintain service ratios. The proposed Project would not require the provision of new or expanded government facilities such as fire protection, police protection, schools, or parks. There would be no impact to public services.

3.16 Recreation

| <i>Issues (and Supporting Information Sources):</i> | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i> |
|--|---------------------------------------|---|-------------------------------------|-------------------------------------|
| 16. RECREATION: | | | | |
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

- a) **No Impact.** The proposed Project would not require or involve the construction of any new or expanded recreational facilities. The proposed Project would not require additional staff at the KFA member districts and would not induce population growth (see Population and Housing above). Because the proposed integration would not introduce population growth, it would not result in an increase in the use of these existing recreational facilities within the area. Therefore, the proposed Project would result in no impacts to the physical deterioration of recreational facilities.
- b) **No Impact.** The proposed integration may change the relative amount of water diverted at points along the Kern River during wet hydrologic periods (see Hydrology and Water Quality above). The changes would occur primarily downstream of Lake Isabella between the First Point and Second Point of measurement. The Kern River includes recreational facilities for recreational activities, such as rafting, boating, swimming, and fishing downstream of Lake Isabella. Although the proposed Project could potentially affect Kern River diversions and therefore flows; the project-related changes would occur during wet periods of the year when river flow is plentiful. Thus, the relative change in diversions would not be expected to affect flow such that recreational activities would be adversely affected. There would be no change in recreational activities on the Kern River due to the proposed Project, and no commensurate adverse physical effect on the environment. There would be no impact.

References

Wild and Scenic Rivers Council, 2017. Kern River, California. Available at: <https://www.rivers.gov/rivers/kern.php>, accessed March 21, 2017.

3.17 Transportation and Traffic

| <i>Issues (and Supporting Information Sources):</i> | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i> |
|--|---------------------------------------|---|-------------------------------------|-------------------------------------|
| 17. TRANSPORTATION/TRAFFIC — | | | | |
| Would the project: | | | | |
| a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Would the project conflict with or be inconsistent with CEQA Guidelines section 15064.3 subdivision (b)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Result in inadequate emergency access? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

a-d) **No Impact.** The proposed Project would not require or involve the construction of any new or expanded physical facilities or water distribution infrastructure. The proposed Project would be implemented with existing facilities, which would be operated within existing capacity constraints. There would be no change in the location or footprint of existing facilities. The proposed management actions would affect the operation of existing facilities but would not require additional staff to do so. The proposed Project would have no nexus with roadways or transportation systems. As a result, the proposed Project would not conflict with local plans, ordinances and policies related to the performance of the circulation system of the area, including transit, roadway, bicycle and pedestrian facilities. The proposed Project would be consistent with CEQA Guideline Section 15064.3, subdivision (b) because it would not cause an increase in traffic which could burden the existing traffic load or exceed any established level of service standards. There would be no increased levels of vehicle miles traveled by any entity due to implementation of the proposed Project. As no new structures would be built, there would be no increased hazards due to related design features or resulting inadequacies of emergency access. Project implementation would not conflict with adopted policies, plans, or programs supporting alternative transportation. There would be no impact to transportation and traffic.

3.18 Tribal Cultural Resources

| <i>Issues (and Supporting Information Sources):</i> | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i> |
|--|---------------------------------------|---|-------------------------------------|-------------------------------------|
| 18. Tribal Cultural Resources — | | | | |
| Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: | | | | |
| a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

- a) **No Impact.** . No California Native American Tribes have requested to be notified of projects under the jurisdiction of the water districts that comprise the Kern Fan Authority, and no known tribal cultural resources are located within the proposed Project area. The proposed Project would not require or involve the construction of any new physical facilities or new water distribution infrastructure. The location and footprint of existing facilities would remain unchanged. No adverse changes to tribal cultural resources would occur as a result of the proposed Project. There would be no impact.
- b) **No Impact.** As discussed under (a), no adverse changes to tribal cultural resources would occur as a result of the proposed Project. There would be no impact.

3.19 Utilities and Service Systems

| <i>Issues (and Supporting Information Sources):</i> | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i> |
|---|---------------------------------------|---|-------------------------------------|-------------------------------------|
| 19. UTILITIES AND SERVICE SYSTEMS — | | | | |
| Would the project: | | | | |
| a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications, the construction of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

- a) **No Impact.** The proposed Project is a water facilities integration project and would not require construction of new water facilities or expansion of existing water facilities. The proposed Project would be implemented using existing KFA facilities; no changes to the location or footprint of existing facilities are necessary to implement the proposed management actions. Additionally, the proposed changes to KFA members' operations would not result in an increase in or change to storm water runoff that would necessitate construction of new storm water drainage facilities. Furthermore, project implementation would not require a need for additional electric power (see the Energy Section above), natural gas, or telecommunications. There would be no environmental effects associated with facility construction due to the proposed Project. There would be no impact.
- b) **No Impact.** The proposed Project is a facilities integration project which would utilize existing KFA facilities to optimize KFA members' operations, thereby reducing the need for construction of redundant facilities or purchases of replacement water and stabilizing costs of KFA district operations. The proposed Project would maximize the use of existing supplies and use existing water entitlements available to each KFA member district and would not require new or expanded water supplies.
- c) **No Impact.** The proposed Project is a facilities integration project and does not generate wastewater that would require treatment. There would be no impact to wastewater treatment capacity

- d/e) **No Impact.** The proposed Project would not generate solid waste and would have no solid waste disposal needs. The proposed Project does not require construction or expansion of facilities and thus would not generate construction-related debris or waste. The proposed Project is a facilities integration project. There would be no solid waste generated during project operation. Therefore, the project would result in no impacts related to local infrastructure capacity and would not impair attainment of solid waste reduction goals. There would be no solid waste regulations applicable to the proposed Project.
-

3.20 Wildfire

| <i>Issues (and Supporting Information Sources):</i> | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i> |
|--|---------------------------------------|---|-------------------------------------|-------------------------------------|
| 20. Wildfire—If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project: | | | | |
| a) Substantially impair an adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risk, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

- a) **No Impact.** As discussed above in Hazards and Hazardous Materials, implementation of the proposed Project would not impair an adopted emergency response plan or evacuation plan. The project would require no construction or activities that would require or necessitate emergency response, and changes in operations of existing facilities would not take place within public rights-of-way or areas which would interfere with emergency response protocols or evacuation routes. No impacts would occur.
- b) **No Impact.** According to the California Department of Forestry and Fire Protection (CAL FIRE), the project area is located within moderate, high, and very high fire hazard severity zones (FHSZs) within relatively flat land (CAL FIRE, 2019). The proposed Project would not require construction activities, which could include equipment or on-site diesel fuel that could pose a risk to wildfire with possible ignition sources such as internal combustion engines, gasoline-powered tools, and equipment that could produce a spark, fire, or flame. Furthermore, the project does not involve operation of any new facilities, or new permanent workers or occupants within the project area. Therefore, the proposed Project would not exacerbate wildfire risk by exposing structures or people to increased pollutant concentrations from a wildfire or uncontrollable spread of wildfire due to slopes, prevailing winds or vegetation within high fire hazard risk areas.
- c) **No Impact.** The proposed integration would not result in the installation of permanent roads, fuel breaks, emergency water sources or new power lines and other utilities. No construction of facilities would occur. Therefore, the proposed Project would not exacerbate fire risk or result in temporary or ongoing impacts to the environment.

- d) **No Impact.** As discussed above in the Geology, Soils, and Seismicity, and Hydrology and Water Quality sections, the project would not result in increased drainage or runoff that could contribute to landslide or flooding impacts. No impact would occur.

References

CAL FIRE, 2019. FHSZ Viewer. Available online at: <http://egis.fire.ca.gov/FHSZ/>, accessed March 2019.

3.21 Mandatory Findings of Significance

| <i>Issues (and Supporting Information Sources):</i> | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i> |
|--|---------------------------------------|---|-------------------------------------|-------------------------------------|
| 19. MANDATORY FINDINGS OF SIGNIFICANCE — | | | | |
| a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Does the project have impacts that are individually limited but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

- a) **No Impact.** As previously discussed above in Sections 3.4, 3.5, 3.7, and 3.18, the proposed Project would have no impact to Biological Resources, Cultural Resources, or Tribal Cultural Resources.
- b) **Less than Significant Impact.** The proposed Project would have no significant impacts and would require no mitigation measures, based on the analyses provided for all environmental topics in this Environmental Checklist. The proposed Project would have no additional impacts relative to those identified in previous CEQA documents for the KFA member districts’ individual facilities with the exception of less than significant impacts to river flow and groundwater as described in Section 3.10 of this checklist, as well as less than significant impacts to air quality, GHG emissions, and energy use as described in Sections 3.3, 3.6, and 3.8 of this checklist. Nonetheless, a discussion of the cumulative impacts associated with integration of KFA facilities is required by CEQA, which stipulates that even though individual impacts may not be significant, this does not preclude the potential for cumulative impacts to be significant.

The following is a summary of proposed future related projects that could potentially contribute to cumulative impacts when considered together with operation of the existing KFA facilities.

Related Cumulative Projects

James Project

The James Groundwater Storage and Recovery Project is a proposed 2,070 acre project in southwest Bakersfield designed to recharge, store and recover water to provide a cost-effective and reliable water supply for landowners within Rosedale and Buena Vista. The Project would help provide an affordable and reliable water supply to approximately 25,000 acres of irrigated agriculture and over 10,000 residents within Rosedale, and to the lands and landowners within Buena Vista.

The project property, known locally as McAllister Ranch, was formerly a planned residential development that was in the early stages of construction. Due to the downturn in the real estate market and project financing issues, development was discontinued and the property sat idle for several years until it was sold in a bankruptcy proceeding. Rosedale and Buena Vista jointly purchase the property in 2011. The CEQA process is anticipated to begin in 2019 or later.

Kern River Flow and Municipal Water Program

The City of Bakersfield's Kern River Flow and Municipal Water Program (Proposed Program) represents a continuation of the City's policies and prior efforts to protect and preserve the Kern River, consistent with past planning and implementation efforts. Previous Kern River-related planning processes focused mostly on land use practices and policies along the river. The Proposed Program instead focuses on providing more streamflow in the river channel through the acquisition of new water supplies to support and enhance the municipal water supply. The Program would provide flows that maintain and enhance the river as an important resource for the community and the water supply for the City and region.

In most years, there is little or no flow of water in the Kern River channel below the Calloway Weir. In order to implement the Program, the City would combine potentially unappropriated surplus water obtained by the City through its application to the SWRCB with some portion of its current water supplies to provide a regular and more consistent flow of water in the Kern River channel.

The Proposed Program aims to increase, protect, and preserve the City's municipal water supply to meet present and future demands for water. The Proposed Program is intended to support the City's stated goal to conserve, protect, and enhance the natural resources of the Kern River, while also providing important flood management and water supply needs. The City's Program will leave more water in the Kern River

Kern Water Bank Conservation and Storage Project

In September 2007, the Kern Water Bank Authority (KWBA), on behalf of five of its six member entities (Dudley Ridge Water District, Semitropic Water Storage District, Tejon-Castac Water District, Westside Mutual Water Company, and Wheeler Ridge-Maricopa Water Storage District [the KWBA participating members]), filed a water right

application (Application 31676) with the State Water Resources Control Board (State Water Board) to appropriate up to 500,000 acre-feet per year (AFY) of water from the Kern River to the Kern Water Bank (KWB) for irrigation, municipal and industrial (M&I) use, for underground storage, and for fish and wildlife habitat enhancement. In February 2010, the State Water Board issued an order removing the fully appropriated status for the Kern River, finding that Kern River flood water that enters the California Aqueduct is available for appropriation.

If granted water rights from its Application 31676, then KWBA would implement the Conservation and Storage Project, diverting up to 500,000 AFY of Kern River floodwater in certain high water years when excess flood waters are available for recharge and storage using existing facilities within the Kern Water Bank. The water diverted would serve to provide greater certainty and reliability in multi-dry years for ongoing irrigation, municipal, and industrial uses that rely on the Kern Water Bank. The Final EIR for the Conservation and Storage Project was completed in November 2018 (SCH #2012021041).

Cumulative Impacts

With respect to Hydrology and Water Quality, the future related projects described above would provide additional groundwater replenishment capacity that would benefit groundwater levels in the Kern County Subbasin and enhance water supply reliability. When considered together with the proposed Project, there would be cumulative beneficial impacts to groundwater levels and cumulative beneficial support for sustainable groundwater management.

The future related projects that involve Kern River water rights and diversions could, if implemented, affect flow in the Kern River in the proposed Project area. The Kern River Flow and Municipal Water Program could increase the amount of water in the Kern River. The Conservation and Storage Project could decrease the amount of water in the Kern River. These projects, along with others, were evaluated recently in KWBA's Final EIR for the Conservation and Storage Project (KWBA, 2018). In the analysis of cumulative impacts for the Conservation and Storage Project, the Final EIR states that under high-flow conditions, the flow in the Kern River would not be expected to change considerably and would not be cumulatively considerable (KWBA, 2018a).

The KFA's proposed Project could result in an increase in diversion of high-flow Kern River water during wet hydrologic periods when flow in the river is plentiful. The proposed Project may result in changes to the relative amount of water diverted by the KFA agencies at existing diversion points on the Kern River. KFA agencies would transfer or divert high-flow Kern River water amongst each of their facilities to provide the most wet year yield for the Project area. No new entitlements would be required to implement the proposed Project. When considered together with future related projects and the cumulative condition as assessed in the KWBA Final EIR, the proposed Project similarly would not result in cumulatively considerable impacts to flow in the Kern River. Impacts would be less than significant.

- c) **No Impact.** The proposed Project is not expected to have substantial adverse effects on human beings, either directly or indirectly. As discussed above, the proposed Project would have no impact to sensitive receptors related to Agriculture and Forestry Resources, Air Quality, Hazardous Materials, Seismic Hazards, Greenhouse Gas Emissions, Land Use, Noise, Public Services, Recreation, or Utilities. Implementation of the proposed Project would not require construction activities and as such would not generate construction-related air emissions or noise or release hazardous materials. Continuing an integrated operation of existing water supply facilities would not alter existing environmental conditions that affect human beings. There would be no impact.

References

- City of Bakersfield, 2012. Kern River Flow and Municipal Water Program, Draft Environmental Impact Report, Bakersfield, CA.
- Kern Water Bank Authority, 2018a. Conservation and Storage Project Environmental Impact Report, SCH# 2012021041. Draft prepared by ICF, January 2018.
- Kern Water Bank Authority, 2018b. Conservation and Storage Project Environmental Impact Report, SCH# 2012021041. Final prepared by ICF, November 2018.
-